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COLLEGE CHOICE: FACTORS INFLUENCING HIGH SCHOOL SENIORS' DECISION TO ENROLL AT PRIVATE COLLEGES IN SOUTH CAROLINA

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COLLEGE CHOICE: FACTORS INFLUENCING HIGH SCHOOL SENIORS' DECISION TO ENROLL AT PRIVATE COLLEGES IN SOUTH CAROLINA

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ABSTRACT

This study explores the influential factors of high school seniors in their college choice. The participants in this study were high school seniors planning on attending a four-year co-educational non-HBCU private higher education institution in South Carolina. The sample included four participant institutions and 202 total participants. A survey instrument was sent to each participant from an institutional gatekeeper. The survey included demographic questions and specific factors that were rated on a 5 point Likert scale. A factor analysis was conducted on the data and resulted in three factor clusters. The three factors were named: (a) family influence, (b) institutional outreach, and (c) campus/community characteristics. An ANOVA was conducted to determine if a significant difference occurred on the three factor clusters among the four participant institutions. The ANOVA found that the factors of institutional outreach and campus/community characteristics were significantly different among institutions and the family influence factor was not.

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My family has played an important role in helping me along the way with encouragement and belief that I could and would finish even though I had fleeting doubts. When I needed help or just a friendly face to see, my friends were always there to lend a helping hand. Special thanks go out to JTO, Utley, Mitch Mitchell, Matt Della Sala, Dr. Rob Knoeppel, Chris Massey Griffin, and everyone else who helped me along the way. I would like also thank anyone who doubted me; your doubts make the fact that I have finished this process mean even more to me.

DEDICATION

My dissertation is dedicated to my mother Maryan Wenderoth. She has always believed in me like no other person in my life. Beyond being my mother she is also my best friend. Thank you for never giving up on me, I love you.

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CHAPTER I

INTRODUCTION

The process of choosing a college for high school seniors can be challenging and stressful (Whitehead, Raffan, & Deaney, 2006). Once a student has completed the application process and has been admitted to multiple institutions, the student's process of determining which institution to attend is influenced by many factors (Pampaloni, 2010). Having knowledge of the factors that influence student's decision to enroll provides institutions with a better understanding of how to influence prospective students to enroll at their institution.

As financial resources diminish and higher education institutions find the need to increase enrollment to meet budget constraints (Jones & Wellman, 2010), admissions offices require knowledge of potential influential factors in the decision process of admitted applicants. The purpose of many college admissions offices, especially private colleges, has shifted from "selecting a balanced class to maximizing tuition revenue" (Newman, Couturier, & Scurry, 2004, p. 12). Enrollment managers view high school seniors as having a stronger impact financially compared to transfer students because of the potential of having them as paying customers for four years. For this purpose, this study is limited to first-time full-time freshmen. To increase enrollments while responding to decreasing budgets, higher education admissions officers can better meet the needs of their institutions by understanding and utilizing information on influential factors in the decision process of high school seniors as they move from accepted applicants to enrolled students.

Background of the Study

Researchers have concluded that some of the expected tangible benefits of a college education include higher potential earnings and lifelong learning (Hossler, Braxton, & Coopersmith, 1989). As this research illustrated, there are benefits to attending college, and the determining of which benefits aid in the college choice decision-making process is the crux of this research study.

Even though all of the benefits of a college education are not tangible, factors that are important in the college decision process are viewed in college choice modeling. Choice modeling is an approach to determining factors that influence students' college choice. Luce (1959) developed his model of choice to find the probability for a product to be chosen against another similar item. The Luce model was a commonly used paradigm in the marketing industry (McFadden, 1980). The Luce approach to modeling was further enhanced by Thurstone's Multi-Nominal-Probit (1968), which took the Luce model and expanded it to include more than one outcome choice. McFadden (1980) expanded on earlier models to create a Noble Peace Prize-winning model that provided further exploration into the reasoning behind decision making. Hossler and associates also (Hossler, Braxton, & Coopersmith, 1989; Hossler & Gallagher, 1987) developed a college choice model expanding on the works of Luce, Thurstone, McFadden, and others that provided information about the college choice process of high school students. Past models have provided an understanding of the process of college enrollment as a student transitions from a prospective student to an applicant. This research provides an understanding of the process from admitted student to enrolled student.

Many variables surrounding high school seniors have been studied to determine their importance in the college choice process. These categories included: (a) demographic influences, (b) social influences, and (c) institutional influences (Cabrera & La Nasa, 2000; Hayes, Walker, & Trebbi, 1995; Hurtado, Inkelas, Briggs, & Rhee, 1997; Kim, 2004; Shank & Beasley, 1998; St. John, 1999). The first category of demographic influences includes: (a) gender, (b) race, and (c) socio-economic status (SES). Researchers have found that gender has a strong impact on the college decision process specifically with certain university characteristics (Shank & Beasley, 1998). Men have been shown to value athletics and social aspects of the campus while women are more concerned with the safety and diversity of an institution (Hayes, Walker, & Trebbi, 1995). Race has been cited as a demographic factor in which significant differences occur among racial groups in a high school senior's college choice. Many minority students perceive the most important factors in choosing a college as financial need, availability of financial aid, and proximity to home (Cabrera & La Nasa, 2000; Kim, 2004; St. John, 1999). Socio-economic status of a student's family can play a vital role in a student's college choice with tuition increases occurring in many institutions (Cabrera & La Nasa, 2000; Hurtado, Inkelas, Briggs, & Rhee, 1997).

Social differences among high school seniors have been found to play an important role in the college choice process (Cabrera & La Nasa, 2000; Choy & Ottinger, 1998, Helwig, 2004; McDonough, 1997; Toma & Cross, 1998). Four sources have been highlighted as having the most influential social power over high school seniors. These social influences include: (a) parents, (b) secondary level (guidance counselor, teachers,

peers, and friends), (c) collegiate athletics, and (d) reputation of the institution (Cabrera & La Nasa, 2000; Choy & Ottinger, 1998, Helwig, 2004; McDonough, 1997; Toma & Cross, 1998). Parental influence has been regarded as the single most powerful factor for high school seniors in their college choice process (Cabrera & La Nasa, 2000; Chapman, 1981). High school influences including peers, friends, guidance counselors, and teachers play a significant role in high school seniors' decision to apply and ultimately enroll at particular colleges (Helwig, 2004; Hossler, et al., 1999; Rosen, Curren, & Greenlee, 1996). Toma and Cross (1998) reported that collegiate athletic rankings and championships attained have an effect on student choice. The rankings provided by the *U.S. World and News Report* are often viewed as prestigious and can affect a high school senior's decision on where to enroll (Broekhemier & Seshadri, 1999; Monks & Ehrenberg, 1999).

Researchers have found that higher education institutions have specific factors that the institution can control to influence a high school senior's college choice (Jackson, 1982). Those specific factors include: (a) promotional materials, (b) proximity, and (c) campus infrastructure (Capraro, Patrick, & Wilson, 2004; Hite & Yearwood, 2001; Pampaloni, 2010). Promotional materials are often sent to high school students after national test sessions, and they continue to be delivered until a student enrolls in a particular institution. Parents and students have been critical of these publications as they are often unsolicited. The material is distributed in the guise of information but often appears to be only propaganda (Armstrong & Lumsden, 1999; Hossler, et al., 1999). Reviewing materials sent from an institution is an important step of the decision process,

but a campus visit has been viewed as an important opportunity for an institution to sway a student in a positive or negative manner (Rosen, Curren, & Greenlee, 1998). The organizational image that a campus exudes plays a role in the application and enrollment choice of a high school senior (Elliot & Healy, 2001; Pampaloni, 2010).

Organization of Study

This research study is presented in five chapters. Chapter I includes the background of the study, the statement of the problem, purpose of the study, significance of the study, research design, limitations, delimitations, definitions of terms, and the theoretical and conceptual frameworks. Chapter II presents the review of literature, which includes history of admissions in higher education in the U.S., private colleges, choice models, demographic influences, social influences, and institutional influences. Chapter III describes the methodology of the study and includes research design, selection of participants, instrumentation, data collection procedures, data coding, and data analysis. Chapter IV includes the results of the study, participant demographic information, and analysis of the research questions. Chapter V includes a summary of the study, discussion of the findings, implications for practice, recommendations for future research, and the conclusion.

Statement of the Problem

Challenging economic times in the United States have created financial repercussions in education, constituting a financial crisis in higher education (NACAC, 2010). The decrease in funding and financial resources has forced institutions to cut programs and systematically change their budgeting strategies which means that,

"furloughs and layoffs are widespread, class sizes are increasing, sections are being cut, and students can't get into classes needed for graduation" (Jones & Wellman, 2010, p.7). With the knowledge of factors that strongly influence college choice, higher education institutions must spend their budgets efficiently to attract prospective students.

Colleges and universities spend millions of dollars on enrollment management and admissions every year (Capraro, Patrick, & Wilson, 2004). A clear understanding of the vital influences in a student's decision to attend an institution can assist decision makers with how to best manage their budgets. With an awareness of which factors cannot be influenced by an institution, decision makers can focus on those factors that can be influenced in a student's decision.

Researchers studying high school seniors' college applications and enrollment choices have found many factors influential in their decision making. These factors include the social factors of peers, friends, guidance counselors, parents, collegiate athletics, and prestige (Cabrera & La Nasa, 2000; Choy & Ottinger, 1998, Helwig, 2004; McDonough, 1997; Toma & Cross, 1998). Varying student demographic factors such as race, gender, and socio-economic status have an influence on the high school seniors' college application and enrollment choices (Horvat, 1996; Hurtado, Inkelas, Briggs, & Rhee, 1997; Kim, 2004; King, 1999; Perun, 1982; Shank & Beasley, 1997, Trent, Owens-Nicholson, Eatman, Burke, Daugherty, & Norman, 2001). Lastly, researchers have posited that higher education institutions have an influence on the college enrollment choices of high school seniors through promotional materials and campus aesthetics (Adams & Eveland, 2007; Armstrong & Lumsden, 1999; Cantebury, 1989; Elliot &

Healy, 2001; Hegeman, Davies, & Banning, 2007; Pampaloni, 2010; Rosen & Greenlee, 1995; Rosen, Curran, & Greenlee, 1998; Sung & Yang, 2008). Knowledge of the factors that an institution can influence can assist enrollment managers in creating strategies to properly influence those factors to enroll more students.

Purpose of the Study

The purpose of this study is to provide information on the influences on the decision by high school seniors enrolling at private colleges and universities. Institutions can conduct similar research on their students and analyze data to create programs and initiatives that elicit a better understanding of their incoming students and the factors they can influence to attract more students to their institution. Utilizing the data from this study and applying a similar instrument to their incoming freshman class will assist data-driven enrollment managers to maximize their enrollment budgets.

Significance of the Study

The significance of this study is that factors found to influence incoming freshmen in their college choice can assist higher education institutions admissions offices in strategically influencing high school seniors to attend their institution once they have been offered admission. Colleges and universities spend "thousands of dollars for each student they enroll" (Capraro, Patrick, & Wilson, 2004, p. 94). As higher education institutions allocate large amounts of money per enrolling student, the institution's knowledge of how to directly influence that decision can assist it in spending money in the cost effective ways that could provide effective reallocation of funds and human capital.

Many studies have been conducted on influences for high school seniors to apply to college (Cabrera & La Nasa, 2000; Choy & Ottinger, 1998, Helwig, 2004; McDonough, 1997; Toma & Cross, 1998). While these previous studies have provided information on what factors influence a student to apply to a college, this study expands beyond the application process by offering similiar institutions some of the influential factors for students to enroll in that institution. This knowledge can assist institutions' strategic spending at the point where accepted applicants decide to enroll. In the current economic turmoil, higher education institutions must conserve money and human capital and ultimately spend wisely; the knowledge of what factors are important to moving students from accepted to enrolled and using this knowledge to directly influence these students' decisions can provide some budgetary continuity for the institution. At a time when resources are limited, being able to use data-driven enrollment planning is essential for an institution.

Research Design

A quantitative survey research methodology investigating "trends, attitudes, or opinions of a population by studying a sample of that population" was used to explore the factors of influence on the population of interest (Creswell, 2008, p. 146). The population of this study was high school seniors who were becoming first-time, full-time freshmen at private co-educational, non-Historically Black College and Universities (HBCU), non-profit four-year colleges and universities in South Carolina. Kim (2001) found that women attend single-sex institutions because of a desire to influence their social conditions. The researcher decided based on past research to remove single-sex

institutions from the study. Students who attend HBCU's have been cited as attending these institutions because of wanting to learn or draw a stronger connection with their culture (Freeman & Thomas, 2002) and were thus removed from the population in this study. Data collected from each participant institution was collected between June and August 2012, before the participants enrolled at their institution. Surveying the students before enrollment enhances the probability for each participant to recall accurately their reasoning for their decision to enroll. Surveying the participants before enrollment does provide the limitation that the student has not enrolled and due to unforeseen circumstances might not enroll at the institution.

The instrument utilized in this study was adapted from Smith (2007) with the goal of determining influences on incoming freshmen at private colleges and universities in South Carolina. The original researcher granted permission for this adaption of the instrument (See Appendix B). The survey contains two sections. Section one is a demographic section requesting information including: (a) gender, (b) race, (c) high school GPA, (d) combined verbal and quantitative SAT score or ACT score, (e) high school rank, (f) parental education, (g) first generation status, (h) household income, (i) proximity from home, (j) number of institutions applied to, (k) number of acceptances, and (l) numerical position of institution chosen. The second section included potential influential factors from literature in a Likert scale. The five point scale included the following choices: (1) no influence, (3) some influence, and (5) most influential. It is estimated that the survey took approximately 15 to 20 minutes to complete.

The researcher utilized a gatekeeper at each research site who collected a list for the researcher with email addresses of students who had informed the institution that they planned on enrolling at the institution for the fall 2012 semester as first time freshmen. The researcher requested written permission from the Institutional Research Office of each institution to contact their incoming freshmen. Only two institutions required IRB documentation and the researcher completed the process at each participant institution. The researcher sent an email to each institutional gatekeeper that was forwarded to all of their incoming students who were classified for the study. The email was sent from the admissions office of each school to protect anonymity of each student and email address.

Another reason the email was sent from the institution was to increase the response rate because more students were likely to open and respond to an email from the institution they were planning to attend. The email included information about the anonymity of each participant and the scope of the study. A link was provided in the email that connected to the online survey. The researcher provided one reminder email to the institution to send to all participants to boost the rate of response (See Appendix E for both emails sent to potential student participants).

The data from the survey was exported into a Microsoft Excel spreadsheet and cleaned for any errors or missing data. *Statistical Package for the Social Sciences (SPSS) 17.0* (Norušis, 2009) was utilized for this study and the data were exported into the program from an excel spreadsheet. Statistical analysis of the data included descriptive statistics, a factor analysis, and the running of an ANOVA (Kachigan, 1991). The data from the factor analysis and ANOVA were used to answer the research questions of the

study. The factor analysis was used to discover which individual variables would combine to create stronger factor clusters in order to determine which factor clusters were the most influential in the decision to enroll at the institution. The ANOVA was used to determine if a significant difference in the influential factors occurred between the institutions.

Research Questions

In this study, the following research questions were asked:

1. What factors influence a high school senior's decision to attend private, co-educational, non-HBCU higher education institutions in South Carolina?
2. Do the factors of influence differ among these institutions?

Limitations

The study has the following limitations:

1. This study only contains responses from four institutions and the results may not be generalized to other institutions including those with similar Carnegie classifications. The four institutions are described as four-year private college and universities in the state of South Carolina. College and universities in South Carolina that were single sex or HBCU's were excluded from the study.
2. The sample in this study includes only first-time freshmen applicants and the results only pertain to this specific group. First-time freshmen are classified as incoming students who graduated from high school in 2012. Students who were or currently are under the age of 18 were not included.

3. Participants in the study may ultimately not attend the institutions used as the research sites because of unforeseen circumstances. This study was conducted during the summer before the freshman year of each student and before the fall semester and actual entry into the university commenced. The time between when the survey instrument was completed and the beginning of the fall semester was intentional because the researcher did not want the students to attend orientation before completing the instrument.
4. The participants in this study chose to complete the survey instrument and provide their demographic information and beliefs. The fact that respondents and non-respondents could differ greatly and thus the results would be changed if the non-respondents had responded is called response bias (Creswell, 2008). Thus, the results in this study only contains some of the beliefs of the population studied and cannot be generalized for the entire population.
5. In factor analysis four or more individual variables with eigenvalues above 0.4. Only three factors loaded with four of more variables but more factors could have loaded with four or more variables if more variables were in the survey instrument and similar in subject to variables that were present.
6. The number of participants in this study (n=202) was low and thus the ANOVA which was run had a limited scope in comparing the institutions that participated in this study.

Delimitations

The delimitations were used by the researcher because the specific population captured in this study was first-time freshmen before the fall semester of their first year. Until students enroll and begin classes at an institution, the option of attending another institution or not attending a higher education institution could possibly exist. The timing of the administering of this study prior to these potential students' first term of entry was also chosen because the sample was able to recall their college choice process and the factors that assisted with that decision.

Definition of Terms

The ensuing list of definitions is provided to clarify terms that will be used throughout the study.

1. **A High School Senior** is a 12^{th} grade student who is in the last year of high school academically (National Center for Education Statistics, 2012).
2. **First-time, full-time freshmen** are high school students who have graduated from high school or will graduate in 2012. Students who have completed college credits through dual enrollment or through a community college or other program will be included in the sample (National Center for Education Statistics, 2012).
3. **Full-time enrollment** is defined as a student who is enrolled in the minimum number of credits to be considered eligible for financial aid (National Center for Education Statistics, 2012).

4. **Four-year private college or university** is a higher education institution that is not controlled by the state and is privately funded but still classified as a non-profit organization (National Center for Education Statistics, 2012).
5. **A coeducational college or university** is a university which enrolls male and female students (Kinzie, Thomas, Palmer, Umbach, & Kuh, 2007).
6. **Non-HBCU** is a higher education institution that does not specifically recruit students of one race (Freeman & Thomas, 2002).
7. **A Gatekeeper** is an individual who allows access to a group of people ("Gatekeeper," 2013).

Theoretical and Conceptual Framework

Choice modeling with an emphasis on Perna's (2006) work was the theoretical framework for this study. Perna (2006) focused on the final decision of a student when determining which college to attend when faced with multiple options. High school seniors are influenced by many factors, and this study examines those factors to determine those which strongly influence their decision to attend private colleges and universities in South Carolina.

Figure 1 shows the conceptual framework of the study and how each of the clusters of influential factors will combine to create the choice. When combined, the clusters illustrate the final decision (Perna, 2006). Each factor cluster is important and plays a role in the process but single factor clusters can be prominent in different individuals.

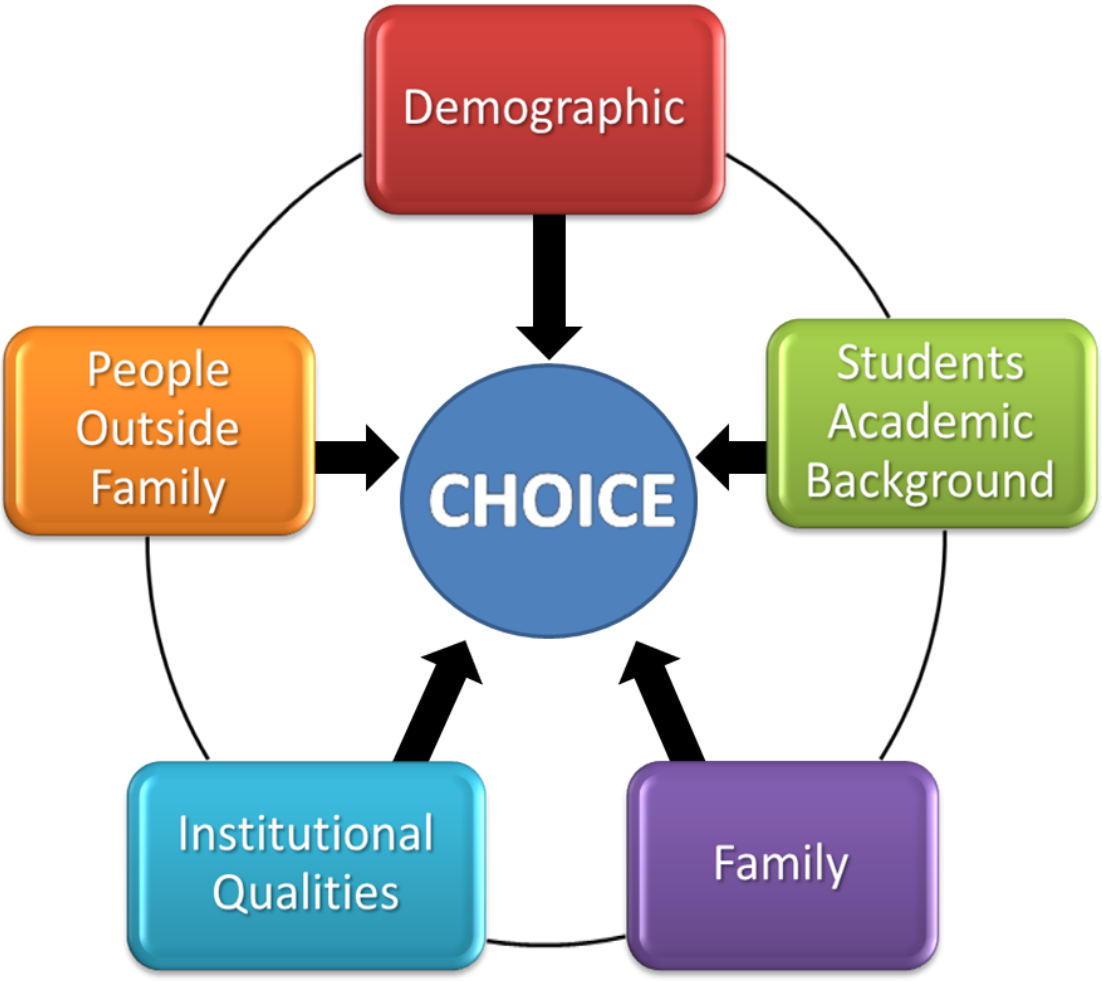

Figure 1. Factor Clusters

Summary

Higher education institutions are experiencing heavy financial crises and must create effective ways to wisely spend their budgets. Having knowledge of what factors influence the enrollment decision making process of high school seniors provides institutions with the necessary understanding of which factors they must use their budgets and human resources toward. With increasing enrollment as a goal of many institutions, knowledge of the influences of high school seniors for determining which college to

attend can assist enrollment managers in creating institutional strategies to influence the prospective students. This study aids each research site with information about their incoming first-time freshmen and can potentially assist other similar schools in developing a survey instrument to discover the influences of their incoming first-time freshmen.

CHAPTER II

LITERATURE REVIEW

Introduction

The purpose of this study is to investigate the factors that influence high school students' college choice. Higher education institutions spend a lot of money on strategies that affect the decision of high school seniors to attend their institution (Armstrong & Lumsden, 1999; Speigler, 1998). This study is significant because budgets in higher education are becoming increasingly constricted and investing money, time, and other resources in ventures that yield desired institutional results is imperative.

The method for the literature review was conducted by searching through peer reviewed journals, dissertations, and books about college choice and the decision making process. Literature that was deemed significant was reviewed to determine potential context with the current study. While this study is limited in scope to four institutions, any university using a similar methodology and instrument could potentially investigate some influences of incoming freshmen to determine which factors could be influenced by the institution.

The literature review is organized by first viewing the history of admissions and higher education in the United States. Secondly the literature examines private higher education. The literature review then explains choice models and decision making strategies. Lastly, the literature review examines the significant influences on high school senior's college decision making. Education Research Complete database was utilized

including ERIC, ProQuest, and Google Scholar. The following terms were used by themselves or in tandem to locate the pertinent literature or research:

- College choice
- Decision making
- Choice modeling
- High school seniors
- Late adolescence
- Co-Educational institutions

Boote and Beile (2005) stated that the organization of a literature review should follow a logical progression through the theories and significant information about the subject of the study. The literature review is organized to describe the field of higher education in the U.S. and admissions, private higher education, choice modeling, and influential factors.

History of Admissions and Higher Education in the U.S.

The history of higher education in the United States begins with the colonial period of the late 1700s. Theological education is considered to be the most important single factor for the beginnings of education in the colonies (Brubacher & Rudy, 1976; Thelin, 2011). As higher education grew in the colonies, institutions with a commitment to a specific religion were forced to renounce religious "interdenominational policies and practices"(Brubacher & Rudy, 1976, p.9). In 1750, a new era arose in the colonies to include educational opportunities beyond the clergy and specifically for laymen. The general aim of education was to assist young men with transforming into a class of "gentlemen" (Brubacher & Rudy, 1976).

The importance of secondary education was seen in the expansion beyond elite schools in New England and private tutors or local clergy who had attained education.

Oral examinations became the primary entrance procedure, although Harvard did include an essay written in Latin as a requirement. The procedures and policies regarding admission were mostly uniform in the colonial colleges and the main criterion resided in the knowledge of Latin and Greek. Arithmetic was then added to the list of required knowledge for entrance to higher education (Brubacher & Rudy, 1976).

As secondary education in the United States grew, the need for more higher education options grew as well (Brubacher & Rudy, 1976). In 1859, the Morrill Act was established more institutions of higher education with a larger realm of options for incoming students to study more mechanical and agricultural subjects. The second Morrill Act of 1890 added Historically Black College and Universities into higher education. Institutions primarily aimed at women were also increasing during this time period and into the twentieth century (Lucas, 2006).

The early role of an admissions office was gatekeeper of the institution. As admission offices were reviewing applicants there was a noted lack of standardization among high school student's academic records (Rentz, 1996). This lack of standardization alarmed higher education administrators. In 1870, the University of Michigan began sending faculty members to high schools to assist with instruction and standardizing of the high school curriculum (Rentz, 1996). Beginning in 1880s, associations were created, such as the New England Association of Colleges and Preparatory Schools, to standardize high school curricula in a given region (Rentz, 1996).

As with the end of the nineteenth century, the twentieth century began with access to higher education being primarily for children of affluent families because they were

the only ones who could afford the increasing cost. With the increasing number of higher education institutions, prospective students had more institutional choice than ever before (Comfort, 1925). Being able to choose a specific institution with specifically desired characteristics became more prevalent and college choice and the ability to make the decision on which college to attend began (Ripperger, 1933). The 1940s and 1950s saw the addition of The Servicemen's Readjustment Act of 1944 and other federal initiatives, including the expansion of Historically Black College and Universities. The creation of the College Board, American College Testing, and National Association of College Admissions Counseling were strong developments that bolstered the field of higher education admissions (Roebuck & Murty, 1993).

Coeducational education became more accepted in the 1960s and 1970s as more women and men were attending higher education institutions than at any time in American higher education history (Bonner, 1986). This period became known as the "Golden Age" of American higher education because of the large influx of college students and the thought that a college degree would increase the likelihood of receiving a white collar job (Jencks & Reisman, 1977). The Pell Grant of 1965 provided the opportunity for larger access to higher education beyond the rich and attainable for the masses (Hearn, 1993).

The 1980s were highlighted by a considerable decrease in high school graduates and an increase in the number of educational institutions (Dunn, 1994). Marketing for the high school graduates was important in attracting students to specific institutions and forced admissions professionals to play the role of marketer instead of simply gatekeeper

(Hite & Yearwood, 2001). Institutions were forced to differentiate themselves and market on a national level (Long, 2003). The national economy was strong throughout the 1980s, but the gap between the wealthy and those needing financial support was rapidly increasing. Despite the amount provided by the Pell Grant doubling during the 1980s, choices decreased as increased tuition rates outpaced financial aid (Duffy & Goldberg, 1998). Students needed more money to attend higher education and loans became the new way to afford the rise in college tuition. With more options for students to be able to afford the cost of higher education, college choice models were becoming more common.

During this period, two models of student college choice that were utilized by researchers and predicted why students attended specific institutions. The first model was econometric and posited that the choice of one school over another occurred because of perceived benefits in one institution over another (Hossler, Braxton, & Coopersmith, 1989). The second model posited that sociological factors such as demographic and high school achievement were the main reasoning for attending a specific college (Jackson, 1982). These two models when combined provided the reasoning used by students when making their college choice (Hossler, Braxton, & Coopersmith, 1989).

College enrollment in the 1990s included a trend of the growth of minority enrollment in predominately white institutions with the largest increase among Latino students (Lucas, 1994). As the U.S. government determined more money was necessary for K-12 education, post-secondary education suffered with less money allocated (Kinzie, Palmer, Hayek, Hossler, Jacob, & Cummings, 2004). With less money available from the federal government, colleges and universities were forced to use more institutional

money to create feasible financial aid packages to enroll students (St. John, 1998). As more opportunities arose for students to attend either public or private, four or two year colleges, institutions were forced to make a concerted effort to attract students (Hossler, 1998).

Today, college admissions has expanded beyond basic marketing techniques of targeted mailings, into using outsourced research corporations using market research models to determine which students should receive specific promotional material (Rentz, 1996). In institutions where enrollment is necessary to meet budget demands, admissions officers have evolved from gatekeeper to salesperson for the institution (Rentz, 1996). Data-driven decision making is a vital piece of the enrollment strategy of many higher education institutions because evaluation of an admissions office is based on enrollment numbers.

Private Colleges

The beginning of private higher education in the United States can be traced to Harvard University and the early settlers of the late 1700s and early 1800s (Brubaker & Rudy, 1976). While private higher education institutions were among the first educational institutions in the U.S., the U.S. government overlooked these institutions while assisting with the expansion of public higher education. Private higher education was forced to expand without government assistance. The Dartmouth College Case of 1819 was a landmark decision for private institutions. The ruling in the case allowed for private colleges and universities to have control over their institutions without direct government interference (Trustees of Dartmouth College v. Woodward, 17 U.S. 518, 1819);

Whitehead & Herbst, 1986). The Land Grant Act of 1862 provided land for states to create higher education institutes with the goal of providing agricultural and mechanical education to their residents. The education sought in the Land Grant Act was far from the aim of private colleges and universities but the Act allowed for students to have more options in higher education.

Numerous denominationally based liberal arts institutions were created in the late 1800s to serve a population of students who wanted the enrichment of religious life but an education outside the church (Brubaker & Rudy, 1976). The key to the success of a private college was the president because of the importance to create relationships with the community and leaders of the church. Private denominational and non-denominational colleges and universities have prospered since their early days with strong enrollments in times of high economic prosperity and low in times of economic turmoil (Dezhbaksh & Karikari, 2009).

Today, Private higher education tuition costs are rising at an alarming rate and some schools are pricing themselves out of the market for potential students (Dezhbakhsh & Karikari, 2009). Financial aid and strategic pricing models have become progressively common at private colleges in order to attract and retain lower income and high achieving students. Beyond federal financial aid including grant and loan programs, private college enrollment managers use institutional money to meet some or all of the financial need of the prospective student (Dezhbakhsh & Karikari, 2009).

For the year 2006, private four year college and university full-time enrollment was 550,263 women and 320,370 men (National Center for Education Statistics, 2009).

South Carolina had 2,468 females and 1,317 males attending four year private colleges and universities (National Center for Education Statistics, 2009). According to the National Center for Education Statistics 2004-2006 data, 57.8% of students who attend four year non-profit institutions are female. The racial diversity of private college students included: (a) 73.2% White, (b) 8.7% Black, (c) 8.9%, Hispanic (d) 5.2% Asian, and (e) 3.9% other. The racial makeup of their public four-year institution peers included: (a) 70.1% White, (b) 8.4% Black, (c) 9.7% Hispanic, (d) 6.5% Asian, and (e) 5.4 % other (National Center for Education Statistics, 2009).

Parents education level for student entering private non-profit higher education institutions included: (a) 14.7% high school or less, (b) 20.2% some postsecondary education, (c) 28.5% Bachelor's degree, (d) 36% graduate degree or higher, and (e) 0.6% did not know their parents education level. Education level of parents of students who were entering four year public postsecondary institutions included: (a) 19.3% high school or less, (b) 22.3% some postsecondary education, (c) 29.6% Bachelor's degree, (d) 27.5% graduate degree or higher, and (e) 1.3% did not know their parents educational level (National Center for Education Statistics, 2013).

Choice Models

Choice modeling is used to better understand the choices that are made when a person is confronted with multiple alternatives (Rose & Scarpa, 2008). The information obtained from the data and subsequent analysis provides a cost benefit analysis for an organization to have a stronger understanding of its potential clientele. While choice modeling began with industry and conducting research on tangible food or drink

products, college choice modeling has become a more common activity for enrollment management and admissions offices of college and universities.

Mathematical choice models have evolved in the past fifty years. Seven models of choice are explained to present the evolution of the models and what influential factors could be examined to provide a new model. A new model is necessary to discover if the landscape of admissions has changed and what factors play an influential role in college choice for high school seniors enrolling at a small private liberal arts university.

Mathematical theories that have been created in the past have all expanded from earlier work to create a more definitive and succinct process. The expansion of these theories has created more empirical evidence that captures the essence of decision making. College decision making is a process than encompasses multiple layers including some that can or cannot be impacted by the institution (Hossler, Schmit, & Vesper, 1999).

Luce Choice Axiom

The Luce model of choice, also known as the Luce Choice Axiom, originated as an economics market analysis forecasting tool (Luce, 1959). Luce created the model using a mathematical formula which postulates that probability of choosing an item over another when many options are not affected by the presence or absence of other items (Luce, 1959). In 1977, during a re-evaluation of his previous work, Luce found that while the probability of a choice being made remained, a response bias could occur based on the experimental run (Luce, 1977). In other words, each time the experiment is run differences can occur which would lead to response bias. The Luce model is important

because it began the dialogue of interactions of factors of influence which was later used in the college choice modeling by researchers in the late 1970's. Luce's model used the utility measure that was expanded in McFadden's later models (Manrai, 1994).

Thurstone Multi-Nominal Probit

Thurstone's Multi-Nominal-Probit (1968) was created in 1927, and in 1968 it was amended to expand on the Luce Model. The Multinominal-Probit model approach is used when the dependent variable is nominal and consists of two or more categorical variables. The main limitation of this model is that it relies on the assumption of independence of irrelevant alternatives which in a decision making process can lead the investigator to the wrong conclusions based on the addition of this factor (Luce, 1977).

McFadden's Choice Modeling

McFadden expanded on early choice models to create a model that is respected in the field of mathematics and choice or decision making fields. Evidence of this respect was shown when McFadden won the Noble Peace Prize (McFadden, 1981) for his theory. McFadden's Choice Modeling (1981) theory explains and predicts human decision making behavior. Choice modeling contains many favorable attributes including forcing respondents to consider trade-offs between attributes, estimating the level of customer demand for an alternative, and reducing the incentive for respondents to behave strategically (McFadden, 1981). While this model contains the component of choice, many of the potential choices in the theory did not involve the complexity of college choice. College choice expands beyond the options in this model including the economical and intellectual benefits of a college degree.

Chapman's Model of Student Choice

In 1981, Chapman created his own version of a model of student college choice. In his model, Chapman viewed the interrelationship between the influential variables and examined how those relationships affected college choice. His model contained external influences and student characteristics as the base for the model. The model viewed the intersection of the variables as the nexus of his model. The external influences included: (a) significant persons, (b) fixed college characteristics, and (c) college efforts to communicate with prospective students. The student characteristics included: level of educational aspiration, high school performance, socio-economic status (SES), and aptitude (Chapman, 1981). While Chapman's model can be viewed as a strong step forward in the college choice modeling field, a weakness is that some of the influences have changed since its inception. These changes that reduce college choice included communications to prospective students using websites, emails, and other forms of social media.

Hossler and Gallagher Choice Model

Hossler and Gallagher (1987) created a model of college choice of high school students that included three stages. The three stages are: (a) awareness of attending college, (b) seeking of information and consideration of choices, and (c) final decision (Hossler & Gallagher, 1987). While this model only contains three stages of the college decision making process, it is significant because it was one of the first models of choice which specifically falls in the realm of college choice and decision making (McDonough, 1997).

Cabrera and La Nasa Choice Model

Cabrera and La Nasa (2000) created a choice model that contains stages of college choice and includes multiple factors and outcomes at each stage. The stages in the model included secondary grade levels: (a) 7-9 predisposition, (b) 10-12 search, and (c) 11-12 choice. Each stage presents factors consistent with the cognitive development for each age. This model uses a temporal approach for viewing the influences through the economic and sociological lens of high school seniors and their decision making process with interactions between the stages (Cabrera & La Nasa, 2000).

Perna Choice Model

Perna (2006) proposed a college choice conceptual model which contains the four layers of: (a) social, (b) economic, and policy context, higher education context, (c) school and community context, and (d) habitus. In Perna's model, the outermost layer containing social, economic, and policy context of the decision, is influenced by "social forces" (e.g., demographic changes), economic conditions (e.g., unemployment rate), and public policies (e.g., establishment of a new need-based grant program)" (Perna, 2006, p. 119).

The second layer of Perna's conceptual model includes higher education context and the role that higher education institutions play in college choice. In this layer of the model, higher education institutions influence college choice in three ways. The first way is through the information that the college provides prospective students and families. The second is the attributes and characteristics of each individual institution. The final influence is through the availability of enrollment slots at the institution (Perna, 2006).

The third layer of the model is the school and community context of college choice. This layer contains the social component of when a student is provided assistance in the process, but it also does contain some restrictions for particular students. Teachers and guidance counselors can provide information and assistance with college materials including providing the student with viewbooks, catalogs, and other materials and information obtained by the college counseling or guidance office. The school context can be restrictive especially in low income high schools with fewer materials and the potential for counselors to concentrate on career counseling instead of college guidance (Perna, 2006).

The last of the four contextual layers in the model is individual's habitus. The habitus reveals "an individual's demographic characteristics, particularly gender, race/ethnicity, and SES, as well as cultural and social capital" (Perna, 2006, p.117). This layer is viewed as the most important layer in the decision process because it looks at the individual student and the characteristics that are specific to that one student.

The multiple layers included in this model are based on the assumption that influence on college decision making comes from multiple influential parts. The layers in this model hypothesize that "college choice is ultimately based on a comparison of the benefits and costs of enrolling, assessments of the benefits and costs are shaped not only by the demand for higher education and supply of resources to pay the costs but also by an individual's habitus and, directly and indirectly, by the family, school, and community context, higher education context, and social, economic, and policy context "(Perna, 2006, p.119).

Each model of choice provides a different lens and new perspective into decision making with later versions focusing on college choice exclusively. The Perna (2006) model was utilized as the foundation of this study because this model contains layers that include many factors of influence similar to the current study. This study views the familiar variables of college decision making, but it also views other variables and looks specifically at small private liberal arts colleges. The conclusions drawn from this study in college choice could provide valuable information to both professionals at the college admissions level and those at the secondary school college counseling level.

Demographic Influences: Gender, Race, and SES

While choice models can explain the process of decision making, demographic characteristics describe important influential factors of high school senior's college choice process. When filling out an application, most applicants answer demographic questions about race and gender. The data from the applications are compiled by enrollment managers to discover demographic information about the applicants. Demographic information can have a strong influence on a high school senior's college decision making process. While demographic information is an important factor, it cannot be influenced by a higher education institution (Kim, 2004). Understanding the importance of these factors is imperative for the institution to find ways to counteract what could be deemed an unappealing issue for a specific demographic group (Horvat, 1996; Perun, 1982).

Gender

Widespread access to higher education for women in the United States began in the early 20th century (Perun, 1982). As more women enrolled in colleges and universities, institutions created more academic programs geared towards the needs of women students (Drew & Work, 1998). King (1999) argued that increasing specific enrollment of a particular gender has provided the need for more research on the college choice progress and particularly that comparing the gender differences among high school students.

The significance of institutional characteristics, such as location and choice of academic majors, is impacted by gender in the college decision making process (Shank & Beasley, 1997). The literature in this area has also provided conflicting information on male and female college choice. Hayes, Walker, and Trebbi, (1995) stated that women rated safety, diversity, and a multitude of academic offerings as higher factors in influencing college choice than men. Women value academic reputation more than males in their college enrollment decision process (Broekemier & Seshadri, 1999). Researchers also discovered that men valued varsity and intramural athletics and social life attributes more than women (Broekemier & Seshadri, 1999; Hayes et al., 1995).

Race

Higher education in the United States contains a disproportionate number of enrolled White students compared to minority enrollments (Radford, Tasoff, & Weko, 2009). While access to higher education has increased for minorities (Kim, 2004), the college decision-making process for minority students compared to that of their white

peers is quite different (Trent, Owens-Nicholson, Eatman, Burke, Daugherty, & Norman, 2001). The differences are compounded when the differences among minorities are considered. Each minority group has cultural differences that can change their college choice decision process from that of the peers and includes: (a) proximity to home, (b) willingness to accept loans, and (c) other group specific attributes (St. John, 1999). Financial need and availability is one of the largest factors for all students who are planning on attending college but it is even more common for minority students in their decision making process and can often determine which school they ultimately decide to attend (Kim, 2004).

Financial Need/SES

Beyond choice itself, availability to choices can be affected because of socio-economic status circumstances (Hurtado, Inkelas, Briggs, & Rhee, 1997). Many high school students' first exposure to the realm of higher education occurs without the looming threat of how to pay for college (Cabrera & La Nasa, 2001). High school seniors often come across this issue when narrowing school choices and determining which schools to apply (Cabrera & La Nasa, 2001). Once students are awarded a financial aid package, they can estimate how much it will cost to attend any specific institution. After this stage of the process, the amount of money that is needed to attend the college becomes one of the more influential factors in the decision making process of the prospective student (Kim, 2004).

Socio-economic status is often a defining factor in access to college and the ability to have multiple options for picking an institution (Cabrera & La Nasa, 2001).

Dejardins, Ahlburg, and McCall (2006) found that the student's expectation of aid was a strong influence on the student's decision to enroll. Radford, Tasoff, and Weko (2009) illustrate the impact of SES in college choice when they report that nearly 60 percent of students in private four-year higher education institutions are students from high to high-middle level income families.

Demographic factors of high school seniors are important determining factors in the choice process, but it is often difficult for an institution to have a strong influence on the factors (Kim, 2004). Specific changes can be made, but often those specific changes will not have a direct effect on the final choice of the student (Kim, 2004). The factors of gender, race, and socio-economic status are important for institutions to understand who their students are, but are often some of the most difficult factors for an institution to influence (Horvat, 1996; Perun, 1982). An understanding of how institutional decisions affect different demographic groups provides enrollment managers with important information when creating enrollment strategies.

Social Influences

High school seniors' college choice process is affected by many factors, one of the most prominent being social influences (Cabrera & La Nasa, 2000). While making the college choice decision, students are inundated with a variety of messages coming from persuasive sources (McDonough, 1997). The main sources of this social influence include: (a) family, (b) high school effects, (c) collegiate athletics, and (d) reputation. Unlike demographic factors which an institution cannot influence, the institution, under certain circumstances, can impact these social influences.

Family

One of the stronger social groups who influence high school senior's college choice are parents. Both students and parents identify parental influence as one of the top influences on the college decision making process. Chapman (1981) reported on a study of influence in which 43% of student's listed parental influence as "the most helpful social influence" in the college decision making process (p. 495). Females indicated that parents were more of a source of information about college attendance when compared with their male counterparts (Shanks & Beasley, 1998). Parental influence does contain a variety of facets that go beyond guidance and information. The facets of parent factors include: (a) encouragement, (b) expectation setting, (c) preparation for living away from home, and (d) preparation and assistance with financial matters (Cabrera & LaNasa, 2000).

Another important influence of the college decision process of college seniors includes the parent's education and income (Stage & Hossler, 1989). Parents who have attained an advanced degree view academic reputation as a strong influence on their student's college decision process (Choy & Ottinger, 1998). Families with limited higher education experience can have difficulties understanding post-secondary opportunities and limit their help in the college search process (Perez & McDonough, 2008).

According to Rosa and Hamrick (2002), students of Hispanic descent are influence strongly by their family members including extended family members in their college choice process. Conversely, Ceja (2004) found that parents and family members did not have a large influence in the college decision process of Hispanic students. Their

lack of knowledge about the college choice process played a large role in the lack of influence (Ceja, 2006).

Secondary Level

While parental influence has proven to have the largest effect on students, influential friends, peers, counselors, and teachers at the secondary school level also play a significant role in influencing a student's college choice. For students, Hossler, et al. (1999) found that a friend's decision to attend a particular institution played an influential role in the college decision making process. Broekemier and Seshadri (1999) also found that high school friends played a vital role in the college choice process even though often parents do not realize its importance.

While some social influential groups influence high school students throughout the process, teachers and guidance counselors' influence occurs later in the decision making process during the second half of a high school student's senior year (Helwig, 2004). Rosen, Curren, and Greenlee (1996) found that guidance counselors played a larger role in the earlier part of the student's decision making process, and parents played a later role. Guidance counselors also played a role in the decision making process through their inherent role in the college application process, but that role became more influential when focusing more on the career aspect of the students' higher education planning (Helwig, 2004). Venezia and Kirst (2005) posited that high school students want high school administrators to go through the application process step by step. Financial inequality among school districts was also viewed as a cause of the difference in the quality of the dissemination of information about higher education.

Collegiate Athletics

Collegiate athletics play a large role in providing institutional exposure and name recognition for high school students and parents (Toma & Cross, 1998). The factor of collegiate athletics and its impact on college choice extends beyond those who have been recruited or would like to try-out for an intercollegiate team. Male high school seniors view intercollegiate athletics as a more important aspect of their decision making process than do their female counterparts (Hayes et al., 1995). Another indication of influence on college choice is the number of applications an institution receives. McEvoy (2005) found that an increase in applications and student interest occurred in the period immediately after an institution wins a national championship in Men's basketball or football.

Reputation

Reputation of a particular institution is valued both by students and parents in the college decision making process (Broekhemier & Seshadri, 2000). The most influential vehicle providing knowledge of institutional prestige and comparison of institutions is the *U.S. News and World Report* (Monks & Ehrenberg, 1999). Each fall, rankings of all institutions occur and the publicity associated with the rankings both by the *U.S. News and World Report* and schools that are ranked high create a public awareness of the event (Monks & Ehrenberg, 1999). The *U.S. News and World Report* has become more common as a tool for institutions to boast about their accomplishment of ranking (Brown, 1996).

In summary, social influences have play a strong role in a high school senior's college decision making process. Creating a favorable image is daunting for an institution given the plethora of messages each student receives (Armstrong & Lumsden, 1999). As cited by Cabrera and La Nasa (2000), the impact of strong influential people in the lives of high school seniors is the most important factor in the decision making process. Institutions have devoted significant financial and human capital to enhance their opportunities to win intercollegiate national championships and to rise to the top echelon of academic institutions in publications such as the *U.S. News and World Report* (McEvoy, 2005; Toma & Cross, 1998). Each of these influences continues to affect the college decision making process of high school seniors.

Institutional Influences

Higher education institutions have direct influence over specific factors of high school senior's college decision. These factors can have either a positive or negative influence on a prospective student's decision to attend an institution. These factors included: promotional materials, proximity, and campus infrastructure.

Promotional Materials

Promotional materials often arrive at the homes of high school students once they register or begin to take college entrance exams (Armstrong & Lumsden, 1999). Promotional materials include: brochures, viewbooks, catalogs, letters from current students and administrators, and the campus website. The majority of mailings are received by the student during the junior and senior years of high school and often are sent unsolicited to students or their parents (Cantebury, 1989; Pampaloni, 2010). The

mailings students receive are dependent on the size and focus of the institution. Typically, larger institutions communicate to students about more educational and social opportunities available on campus while smaller schools will portray a family environment on campus (Hite & Yearwood, 2001). According to Hite and Yearwood (2001), one of the main goals of promotional materials is to portray student life at the institution. Researchers have found that students have been critical of college publications with regard to their helpfulness and veracity (Boyer, 1987). Rosen and Greenlee (1995) concluded that unsolicited information was seen to clutter the already large amount of materials received from colleges and often created a negative impact on students. One study found that mailed brochures have been found to reaffirm a choice of institution and not have a direct effect on the choice itself (Hossler et al., 1999).

Budgeting for promotional materials comprises a large amount of an enrollment management office's entire budget (Armstrong & Lumsden, 1999). While enrollment managers do utilize their institutional marketing departments, an outside vendor is often contracted to develop a brand and create the promotional materials (Maringe, 2006). Another important but costly part of the process is mailing the promotional materials to students, high schools, and other constituencies. Data-driven decision making based on research on promotional materials is vital to an institution sending a positive message to influence students to attend the institution (Maringe, 2006).

Since the Internet boom, higher education institutions have spent more of their budgets creating and refining their websites and social media forms of communication with prospective students (Adams & Eveland, 2007). Electronic and print mailings are

seen as a mass marketing tool which often cannot be quantified in terms of a success rate, while websites often track those who enter the site and can provide instant feedback for the institution on the number of views they are receiving (Hegeman, Davies, & Banning, 2007). While internet and mailings from an institution do have an influence in the college choice process, the visit to a college campus provides a deeper understanding of a campus' culture.

Proximity

Another factor that impacts a high school senior's college choice is proximity to the student's hometown. According to a study conducted by Chute (2006), 56 % of students attend a higher education institution within one hundred miles of their hometown. In a study conducted by Choy and Ottinger (1998), the researchers found that location of an institution was provided as one of the top reasons for choosing an institution, with proximity to home as the main reason for the choice. Turley (2009) also found proximity to be a strong influence on students with students applying to more institutions closer to their home and ultimately attending closer institutions. Disadvantaged students often viewed institutions closer to home as the only viable options for higher education including staying at home instead of paying the expense for room and board. Conversely, Hoxby (1997) found that the increase in transportation opportunities has increased the chance for students to feel more comfortable attending an institution that is not in close proximity to their home. While one study found that increased transportation removes some of the issues with proximity to a student's hometown, proximity is an influential factor in many high school seniors' college choice.

Campus Infrastructure

Construction on college campuses has become a common sight with many higher education institutions having several buildings on campus at a given time (Melwar & Akel, 2005). Adding new buildings and creating a campus which exudes a welcoming environment can be challenging but research indicates that it is an important aspect of college choice. It is especially influential in the visit process for high school prospective students and especially their parents (Boyer, 1987). In a survey sent to higher education administrators, over half selected the campus tour as the number one recruiting tool for having a strong influence on prospective students (Rosen, Curran, & Greenlee, 1998). A campus visit provides the institution an opportunity to showcase their campus' beauty, residential options, and "technological infrastructure" (Capraro, Patrick, & Wilson, 2004, p.94). The tour of campus by a current student provides the prospective student and family with information about the social life of the campus but not as much about the academic opportunities (Boyer, 1987). Visiting a college campus can influence the final decision of a high school senior to attend a particular institution because the student and parents gained insight into the campus infrastructure.

Hayes (1989) found that the friendliness of current students, admissions staff, and faculty was an influential factor in the student determining to attend the institution. Henley and Rogers (1997) concluded that the campus visit and admissions representatives visiting high school were important in connecting the student with a specific institution.

Summary

This chapter began with a history of admissions and higher education in the U.S. and private colleges. Also, the chapter provided a profile of private college students. The choice models section described choice modeling and the progression of models to include college choice. The demographics section identified the major literature sources regarding gender, race, and socio economic status including financial need. The literature about social influences provided influential factors of family, secondary level influences, collegiate athletics, and prestige. Institutional influences literature included promotional materials, proximity, and campus infrastructure.

The purpose of this chapter was to provide a basis for research about college choice and factors influencing college choice in private colleges. The research presented identified the impact of demographics, social, and institutional influences on a high school student's college choice. These factors provide a sound framework for the research and illustrate a gap in the literature. This study exploring the influential factors of high school seniors' decision to enroll at private college and universities fills the research gap. This literature review was compiled to create a basis for the study.

CHAPTER III

METHODS

Introduction

In the current difficult economic times, higher education institutions are attempting to meet the needs of the institution with fewer resources. Private colleges and universities depend on enrollment as a significant portion of their budget, and this portion is comprised of tuition dollars (Dezhbakhsh & Karikari, 2009).

Using data-driven decision making to increase enrollment has become a necessity at many private institutions. To discover the reasoning for students to attend a particular institution, conducting research could assist in making quality data-driven decisions.

The primary focus of this study is to determine what factors influence high school seniors' college choice decisions who have indicated they plan to enroll at a private coeducational non HBCU college or universities in the state of South Carolina. All private coeducational non HBCU non-profit four year colleges and universities in South Carolina were invited to participate in the study and administer the survey to their incoming freshmen. Four of the thirteen institutions classified as private co-educational non HBCU colleges or universities chose to work with the researcher on the study. The methodology of the study, including how the research questions were tested, is presented in this chapter. This chapter is divided into five sections: (a) research design, (b) selection of participants, (c) instrumentation, (d) data collection, (e) data analysis, and (f) summary.

Research Design

The purpose of this study was to first determine which factors significantly influence high school seniors' choice to enroll at a private college and universities in South Carolina. The secondary purpose was to discover if there were significant differences in reasons for high school seniors' college choices across the four institutions in the study. The ultimate goal of the study was to provide enrollment managers with some quantitative data of the factors that significantly influenced the high school seniors who participated in this study. Providing the survey instrument in this study allows enrollment managers use a similar instrument and to implement programs and initiatives to better serve and recruit their prospective students.

Two main research questions were created to serve as the objective of the inquiry. The two research questions are:

Research Question 1: What factors influence a high school senior's decision to attend private coeducational non-HBCU higher education institutions in South Carolina?

Research Question 2: Do the factors of influence differ among these institutions?

Selection of Participants

The population of this study was high school seniors who were becoming first-time full-time freshman, traditionally aged students at private co-educational non-profit four year college and universities in South Carolina but not including single sex institutions or HBCU's. Kim (2001) found that women attend women-only institutions because of a desire to influence their social conditions. The researcher decided based on

past research to exclude single sex institutions from the study. Students who attend HBCU's are often cited as wanting to learn or draw a stronger connection with their culture (Freeman & Thomas, 2002). As such, HBCU's were excluded from the study.

The sample was based on the email addresses utilized by the institutions that have been classified as private co-educational non HBCU institutions in South Carolina. Creswell (2008) stated that online survey instruments with email capabilities, such as surveymonkey.com (Survey Monkey Website, 2012), are inexpensive and easy to navigate. Participants were determined by indicating to the institution their intent on enrolling as a first-time full-time freshman in the fall 2012 semester. Each of the four participant institutions were coded alphabetically (starting with A) for institutional anonymity. Each institution agreed to participate in the study with the understanding that only the researcher would know the name of the institutions in the study. The first institution that agreed to participate was coded as institution A with the other institutions following in order. Table 3.1 shows the total full-time enrollment of each participant institution with the number and percentage of those who completed the survey.

Table 3.1

Participant School Total Enrollment

Institution	Total University Enrollment	Complete Surveys	Percent of Completed Surveys by Enrollment
A	1,140	28	02.4%
B	632	16	02.5%
C	1,200	98	08.2%
D	2,400	62	02.6%

Instrumentation

The instrument used in this study was an adapted form of a survey created and utilized Rebel Smith's 2006 dissertation (Smith, 2006). Smith agreed that the author could adapt the original instrument and implement it for this study. The researcher utilized a quantitative survey research methodology investigating "trends, attitudes, or opinions of a population by studying a sample of that population" to explore the factors of influence on the population of interest (Creswell, 2008, p. 146). Using the survey design as stated in Creswell (2008), the researcher implemented a survey with a demographic section and a five point Likert scale section of potential influential factors.

The survey instrument contained two main sections consisting of demographics items and a Likert scale of influential factors. The first question of the survey required the student to indicate if they were 18 years or older. If the student was 18 or older, they could proceed in completing the survey instrument. Those students who were under 18 were asked to not participate in the study. The demographics section included: (a) gender, (b) race, (c) high school GPA, (d) highest SAT score, (e) high school class rank, (f) highest level of education obtained by biological or step father, (g) highest level of education obtained by biological or step mother, (h) first generation status, (i) miles from hometown, (j) number of applications submitted, (k) number of acceptance received, and (l) university attended overall choice.

The second section of the survey instrument contained 33 Likert scale items. The Likert scale contained a ranking of 1 for no influence, 3 for some influence, and 5 for most influential for each item. The factors included: (a) major/program of study, (b)

admissions criteria, (c) student/faculty ratio, (d) reputation of college, (e) academic quality of university, (f) university facilities/housing, (g) summer program/camp held at university, (h) choice of activities (campus life), (i) size of college, (j) size of community surrounding college, (k) distance from hometown, (l) size of hometown, (m) mother (and not father), (n) father (and not mother), (o) both mother and father, (p) siblings, (q) other family members, (r) alumni, (s) friends, (t) boyfriend/girlfriend, (u) high school counselor, (v) teacher(s), (w) athletic program-observer, (x) athletic program-participant, (y) campus visit, (z) open house/on campus event, (aa) college recruiter's visit to high school, (bb) college fair, (cc), university publications/advertisements, (dd) mail received from college, (ee) internet/website, (ff) cost of attendance, and (gg) financial aid offered.

The final section of the survey instrument thanked the participant for participating in the study and offered a raffle for a $200 gift certificate at the bookstore of the institution they were planning on attending. The participants were required to enter their email address in the blank provided to participate in the raffle.

The Likert scale contains items regarding influence on the participant in their college choice process with one meaning no influence, three meaning some influence, and five meaning most influential. Most of the items in the survey instrument were adapted from the Smith (2006) study. All of the items in the current study aligned with the research questions and were used because of literature related to each item. Table 3.2 provides a list of literature that was used for the basis of each survey instrument item.

Table 3.2

Survey Questions by Section and Current Literature

Source(s)	Subject	Survey Question
Hayes, Walker, & Trebbi (1995)	Gender	1
St. John (1999); Kim (2004)	Race	2
Stewart et al. (1987)	HS Academic Achievement	3-5
Choy & Ottinger (1998)	Family Education	6-8
Choy & Ottinger (1998)	Location	10-11
		Section 2
Pampaloni (2010); Broekhemier & Seshadri (2000)	Institutional Reputation	1-5
Capraro, Patrick, & Wilson (2004)	Institutional Social Life	6-8
Choy & Ottinger (1998)	Location/Size	9-10
Turley (2009)	Hometown	11-12
Broekemier & Seshardi (1999)	Family Members	13-17
Shank & Beasley (1998)	Friends	18-20
Siebert (1994)	Secondary School staff	21-22
Toma & Cross (1998)	Athletics	23-24
Capraro, Patrick, & Wilson (2004)	Campus Visits	25-26
Siebert (1994)	Recruiter	27-28
Armstrong & Lumsden (1999)	Recruitment Mailings	29-30
Hegeman, Davies, & Banning (2007)	Internet	31-32
Cabrera & La Nasa (2001); Horvat (1997); Perun (1982)	Finances	33

Data Collection Procedures

The researcher and the participant institution gatekeepers discussed the potential benefits and disadvantages of the researcher emailing the instrument to the participants or the instrument being sent from the institutional gatekeeper. Both groups decided it was

more beneficial for the email to be sent from the institutional gatekeeper. The researcher and the institutional gatekeepers decided on this strategy because if the researcher sent the instrument to the participants, confidential information contained in the files could be available to the researcher. Additionally, the researcher and the institutional gatekeepers decided to have the institutional gatekeeper send the email with the survey instrument to the participants was because it was anticipated that the response would be greater if the email was sent from the institutional gatekeeper. Each institution's gatekeeper distributed the email containing the survey instrument to all new first-time full-time high school seniors who planned to enroll at their institution for the fall 2012 semester. The emails were sent out by the institutional gatekeeper to the participants during the time period of June to August in 2012. Each institutional gatekeeper reported receiving some emails which were returned because of incorrect information or technological issues with the student's email address. Those email addresses were deemed not acceptable and thus those students did not participate in the study. The breakdown for the number of surveys sent per institution is in Table 3.3 on the following page.

Table 3.3

Survey Response by Institution

School	Number of Accepted Emails Sent	Number of Completed Surveys	Return Rate
A	189	26	15%
B	99	16	16%
C	300	98	33%
D	406	62	15%

The Institutional Research Board of Clemson University approved the researcher to execute the study. Two of the four participant institutions required IRB paperwork completed for their institution's IRB office. The researcher contacted the chief enrollment or admissions officer at each institution with a request for the institution to participate in the study.

Using the Website Survey Monkey (Survey Monkey Website, 2012) the survey was emailed to each research site. Throughout the survey collection process, the researcher maintained contact with the institutional gatekeeper via email and telephone correspondence. Each institutional gatekeeper sent the survey to all incoming full-time first-time freshmen who at the time of the email had indicated that they planned on attending the institution in the fall of 2012. A follow up email was sent from each institutional gatekeeper to students who were classified as full-time first time freshmen at their institution including students who received the initial email.

The survey contained a voluntary raffle with a $200 gift certificate to the bookstore at the institution in which they were enrolling. To be included in the raffle, the participant provided an email address in a blank at the end of the survey. After receiving all completed surveys, the researcher put the email addresses provided by participants who indicated their wish for inclusion in the raffle into a Microsoft excel spreadsheet. The email addresses were put in reverse alphabetical order and the researcher picked a random number and chose the participant in that numbered cell. The researcher contacted the raffle winner by email and made arrangements for the participant to pick up the gift card at the institution's bookstore.

The surveys were collected and analyzed by the researcher after being reviewed and exported in Microsoft Excel from the Survey Monkey website. All data were kept secure on a password protected computer in the office of the researcher.

Data Analysis

The researcher executed basic descriptive analyses of the data on questions 2 through 16 including frequencies and percentages. The survey instrument contained 33 items of potential influence with a Likert scale for the participants to rank their answers. Factor analysis was chosen as the method for analyzing the data from the Likert scale. Factor analysis is "a data analytic technique for examining patterns of interrelationship, data reduction, classification, and description of data, data transformation, hypothesis testing, and mapping construct space" (Rummel, 1970). This analysis was appropriate because the survey contained 33 items and the researcher was interested to discover if the individual items could be explained by a smaller number of underlying factors.

Factor analysis is used to reduce the number of variables by combining correlated variables to create factor clusters (Fabrudgar, Wegener, MacCallum, & Strahan, 1999). Exploratory Factor Analysis (EFA) was chosen as the specific analysis in this study. As stated in Costello and Osborne, (2005) EFA is a widely used and respected analysis technique which provides the researcher with potential options to make changes during analysis. Because the researcher wanted the freedom to make necessary changes in the analysis to keep specific variables pertinent to the study and because of strong literature about specific variables, EFA was chosen at the appropriate analysis.

Sample size for a factor analysis was vital in deciding to utilize factor analysis as the analysis technique for the study. Researchers have differed in their opinions on a necessary number of participants for the sample size with researchers positing 100 as an adequate size (Cattell, 1978) while some researchers posit that a minimum of 250 participants are a necessary sample size (Kline, 1979). The researcher determined the sample size of 202 was sufficient because the sample size met the 200 participant threshold (Guilford, 1954). The current study also had a ratio of 5 participants for every variable, considered a necessary minimum by some researchers (Gorsuch, 1983).

The researcher used factor analysis to discover which communalities that were above the 0.40 threshold. The factor analysis was run until no communalities below the 0.04 standard were present. The researcher ran the final factor analysis and reported on the factor clusters containing the standard of four or more individual variables with factor scores above .04 and below -.04 (Mertler & Vannatta, 2002).

An ANOVA was chosen as the method to compare the four institutions in the study to determine if a significant difference between the institutions occurred over the factors that were created in the Factor Analysis. In order to compare each institution, Fishers Least Significant Difference (LSD) was chosen as the method of analysis to view individual differences among the four institutions across the three factors created in the factor analysis. LSD was selected as the method of analysis because researchers have reported LSD to be the most powerful post-hoc test (Carmer & Swanson, 1973).

Summary

This study examines college choice of high school seniors who were becoming first-time full-time students at four-year non-profit co-educational non-HBCU private institutions in the state of South Carolina. The survey instrument was developed by adapting a previously used survey studying the same subject with a different population. The researcher worked with an institutional gatekeeper to email the survey instrument to all first-time full-time students at their institution. A total of 202 participants completed the survey instrument. The completed surveys were coded by the researcher and downloaded into SPSS. The data were analyzed through SPSS including descriptive statistics, factor analysis, and ANOVA.

CHAPTER IV

RESULTS

Introduction

This study explored the influential factors in the decision making process of high school seniors in selecting a higher education institution in which to enroll. The purpose of the study was to discover these influential factors so that higher education enrollment managers could have a better understanding of why students are attending their institutions. The results chapter is presented with descriptive statistics on demographic data and analysis of the two research questions.

The first section contains descriptive statistics for the demographic information collected from the participants who completed the 33 Likert items survey in the study. The demographic information includes frequency distributions and descriptive statistics. Chapter 4 presents the statistical results from the data analysis conducted with the following research questions:

Research Question 1: What factors influence a high school senior's decision to attend private coeducational non-HBCU higher education institutions in South Carolina?

Research Question 2: Do the factors of influence differ among these institutions?

Demographic Information

Demographic data included in the survey were collected and analyzed to provide a strong representation of the sample in the study. The following demographic information was collected: (a) institution, (b) gender, (c) ethnicity, (d) cumulative GPA,

(e) highest SAT or ACT score, (f) class rank, (g) father's highest educational level, (h) mother's highest educational level, (i) first generation status, (j) parents combined income, (k) in state status, (l) miles from home, (m) number of applications, (n) number of acceptances, and (o) choice among institutions. The tables include each demographic variable, the frequency per variable, and the percentage of frequency of each variable

Institution

A total of 202 participants were surveyed in this study. Table 4.1 shows the frequency distribution of the participants by institution.

Table 4.1

Respondent Frequency Distribution by Institutional Participation

Institution	Frequency	Percentage
A	26	12.9%
B	16	07.9%
C	98	48.5%
D	62	30.7%
Total	202	100%

Gender

Participants in the survey were asked about their gender. Over 70 percent of the participants were female. Table 4.2 shows the frequency distribution of the participants by gender.

Table 4.2

Respondent Frequency Distribution by Gender

Gender	Frequency	Percentage
Female	143	70.8%
Male	59	29.2%
Total	202	100%

One hundred and forty-three of the participants were female making up 70.8% of the sample. There were 59 male participants which constituted 29.2% of the sample.

Race

Participants in the survey were asked to identify their race. Over 83 percent of the participants were White. Table 4.3 shows the frequency distribution of the participants by ethnicity.

Table 4.3

Respondent Frequency Distribution by Race

Race	Frequency	Percentage
Hispanic	9	4.5%
American Indian or Alaskan	2	1.0%
Native American	0	0.0%
Black or African American	1	0.5%
Asian	17	8.5%
White	168	83.0%
Bi-Racial	5	2.5%
Total	202	100%

Of the 202 participants, 168 participants (83%) identified their race as White. Seventeen participants (8.5%) identified their race as Asian American. Fourteen participants (4.5%) classified their race as Hispanic. Two participants (2.5%) identified their race as Bi-Racial. Two American Indian participants (1%) were included in the study. Only 1 participant (0.5%) identified their race as African American. No participants identified their race as Native American.

High School GPA

Participants were provided with five categories for describing their high school Grade point average (GPA). The GPA categories were: (a) 3.5-4.0, (b) 3.0-3.49, (c) 2.5-2.99, (d) 2.0-2.49 and (e) below 2.0. Table 4.4 shows the frequency distribution of the participants by high school GPA.

Table 4.4

Respondent Frequency Distribution by High School GPA

GPA	Frequency	Percentage
3.5-4.0	143	70.9%
3.0-3.49	41	20.3%
2.5-2.99	14	06.9%
2.0-2.49	4	01.9%
Below 2.0	0	00.0%
Total	202	100%

Of the 202 participants, 143 indicated their GPA as being between 3.5 and 4.0 (70.9%). Forty-one participants indicated their GPA as between 3.0 and 3.49 (20.3%). GPA of 2.5 and 2.99 contained 14 participants (6.9%). Four participants indicated a GPA of between 2.0 and 2.49 (1.9%) and no participants indicated a GPA below 2.0.

SAT/ACT Score Equivalency

Participants had the option of classifying their Verbal and Quantitative combined SAT score in seven categories or listing their Composite ACT score. To put the scores on the same scale, the researcher took the composite ACT score and transformed these scores into the corresponding SAT scores. The SAT score categories are: (a) 1450-1600, (b) 1300-1440, (c) 1150-1290, (d) 1000-1140 (e) 850-990, and (f) Below 850. In additional students could indicate if they took the ACT and what their score was. Table 4.5 shows the frequency distribution of the participants by SAT score.

Table 4.5

Respondent Frequency Distribution by SAT/ACT Score Equivalency

SAT score	Frequency	Percentage
1450-1600	9	4.5%
1300-1440	29	14.4%
1150-1290	76	37.6%
1000-1140	49	24.3%
850-990	35	17.2%
Below 850	4	2%
Total	202	100%

Of 202 participants, seventy-six participants had an SAT score between 1150 and1290 (37.6%). Forty-nine participants had a SAT score between 1000 and 1140 (24.3%). Thirty-five participants had a SAT score between 850 and 990 (17.3%). Twenty-nine participants had an SAT score between 1300 and 1440 (14.4%). Nine participants had an SAT score between 1450 and 1600 (4.5%). Only 4 participants had an SAT score below 850 (2.0%).

High School Class Rank

The researcher provided five categories for the participants to label their high school class rank. The categories were: (a) top 10%, (b) top 25%, (c) top 50%, (d) top 75%, and (e) bottom 25%. Table 4.6 shows the frequency distribution of the participants by high school class rank.

Table 4.6

Respondent Frequency Distribution by High School Class Rank

Class Rank	Frequency	Percentage
Top 10%	84	41.6%
Top 25%	62	30.7%
Top 50%	37	18.4%
Top 75%	15	07.4%
Bottom 25%	4	01.9%
Total	202	100%

Of the 202 participants, 84 indicated their high school class rank as in the top 10% (41.6%). Sixty-two participants indicated their high school class rank as in the top 25% (30.7%). Thirty-seven participants indicated their high school class rank as in the top 50% (18.4 %) Fifteen participants indicated their high school class rank as in the top 75% (7.4%). Only 4 participants indicated their high school class rank in the bottom 25% (1.9%).

First Generation

The survey instrument also asked the participants if they were a first generation college student. The choices included: (a) yes and (b) no. Table 4.7 shows the frequency distribution of the participants by first generation status.

Table 4.7

Respondent Frequency Distribution by First Generation

First Generation	Frequency	Percentage
Yes	54	26.7%
No	148	73.3%
Total	202	100%

Fifty-four participants identified themselves as first generation college students (26.7%). The majority of the sample including 148 participants (73.3%) identified themselves as not being first generation college students.

Mother's Education Level

The researcher provided seven categories for participants to describe their mother's education level. The categories included: (a) some high school, (b) high school diploma/GED, (c) certificate, (d) Associates degree, (e) Bachelor's Degree, (f) Master's Degree, and (g) Doctorate. Table 4.8 shows the frequency distribution of the participants by mother's education level.

Table 4.8

Respondent Frequency Distribution by Mother's Education Level

Mother's Education Level	Frequency	Percentage
Some high school	05	02.4%
High School Diploma/GED	29	14.4%
Certificate	30	14.9%
Associates Degree	05	02.4%
Bachelor's Degree	36	17.8%
Master's Degree	61	30.3%
Doctorate	36	17.8%
Total	202	100%

Of the 202 participants, 61 participants indicated their mother's education level as a Master's Degree (30.3%). Thirty-six participants indicated their mother's education level as a Bachelor's degree (17.8%). Thirty-six participants also indicated their mother's education level as a Doctorate (17.8%). Thirty participants indicated their mother's educational level as having a Certificate (14.9%). Twenty-nine participants indicated their mother's education level as a high school diploma or GED (14.4%). Only five participants indicated their mother's education level as an Associate's Degree (2.4%). Another five participants indicated some high school as their mother's education level (02.4%).

Father's Education Level

The researcher provided seven categories for participants to describe their father's education level. The categories included: (a) some high school, (b) high school diploma/GED, (c) certificate, (d) Associates degree, (e) Bachelor's Degree, (f) Master's

Degree, and (g) Doctorate. Table 4.9 shows the frequency distribution of the participants by father's education level.

Table 4.9

Respondent Frequency Distribution by Father's Education Level

Father's Education Level	Frequency	Percentage
Some high school	05	02.5%
High School Diploma/GED	44	21.8%
Certificate	36	17.8%
Associates Degree	06	02.9%
Bachelor's Degree	21	10.5%
Master's Degree	53	26.2%
Doctorate	37	18.3%
Total	202	100%

Of the total 202 participants, 53 indicated their father's education level as a Master's Degree (26.2%). Forty-four participants indicated their father's education level as a high school diploma or GED (21.8%). Thirty-seven participants indicated their father's high school education level as a Doctorate (18.3%). Thirty-six participants indicated their father's education level as having a Certificate (17.8 %). Twenty-one participants indicated their father's education level as having a Bachelor's Degree (10.5%). Six percent of the participants indicated their father's education level as having an Associate's degree (2.9%). Only 5 participants indicated their father's education level as some high school (2.5%).

Number of Schools Applied

The researcher asked the participants the number of applications they submitted with four categories provided. The categories included: (a) one application, (b) two-three applications, (c) four-five applications, and (d) six or more applications. Table 4.10 shows the frequency distribution of the participants by number of application submitted.

Table 4.10

Respondent Frequency Distribution by Number of Applications

Number of Applications	Frequency	Percentage
1	28	13.9%
2-3	91	45.0%
4-5	55	27.2%
6 or more	28	13.9%
Total	202	100%

Of the 202 total participants, 91 participants applied to two and three institutions (45%). Fifty and five participants applied to four-five institutions (27.2%). Twenty-eight participants applied to one institution (13.9%). Another 28 participants applied to 6 or more institutions (13.9).

Number of Acceptances

The researcher asked the participants the number of institutions they were accepted at with four categories provided. The categories included: (a) one acceptance, (b) two-three acceptances, (c) four-five acceptances, and (d) six or more acceptances.

Table 4.11 shows the frequency distribution of the participants by number of acceptances they received.

Table 4.11

Respondent Frequency Distribution by Number of Acceptances

Number of Acceptances	Frequency	Percentage
1	31	15.4%
2-3	97	48.0%
4-5	51	25.2%
6 or more	23	11.4%
Total	202	100%

Of the 202 total participants, 97 participants were accepted by two and three institutions (48%). Fifty-one participants were accepted by four and five institutions (25.2%). Thirty-one participants were accepted by one institution (15.4 %). Only 23 participants were accepted by 6 or more institutions (11.4%).

Choice of Institution Attending

The survey instrument asked the participants to rank the college they will be attending among those they were accepted with four categories provided. The categories included: (a) first, (b) second, (c) third, and (d) over third. Table 4.12 shows the frequency distribution of the participants by rank of the college they are attending.

Table 4.12

Respondent Frequency Distribution by Choice of Institution Attending

Choice Rank	Frequency	Percentage
First	143	70.8%
Second	48	23.8%
Third	08	03.9%
Over Third	03	01.5%
Total	202	100%

Of the 202 total participants, 143 indicated they are attending their first choice (70.8%). Forty-eight participants indicated they are attending their second choice (23.8%). Eight participants indicated they are attending their third choice (3.9%). Only 3 participants indicated they are attending an institution that was over third ranked (1.5%).

Household Income

The researcher asked the participants to describe their household incomes from a list of categories. The categories included: (a) Below $20,000, (b) $20,001-$29,999, (c) $30,000-$39,999, (d) $40,000-$49,999, (e) $50,000-$59,999, (f) $60,000-$69,999, (g) $70,000-$79,999, (h) $80,000-$89,999, (i) $90,000-$99,999, (j)Over $100,000, and (k) Unknown. Table 4.13 shows the frequency distribution of the participants by household income.

Table 4.13

Respondent Frequency Distribution by Household Income

Household Income	Frequency	Percentage
Below $20,000	12	05.9%
$20,001-$29,999	11	05.5%
$30,000-$39,999	16	08.0%
$40,000-$49,999	16	08.0%
$50,000- $59,999	20	09.9%
$60,000-$69,999	07	03.5%
$70,000-$79,999	10	04.9%
$80,000-$89,999	07	03.5%
$90,000-$99,999	10	04.9%
$100,000+	43	21.2%
Unknown	50	24.7%
Total	202	100%

Of the total 202 participants, 50 did not know their household income (24.7%). Forty-three participants indicated their household income as over $100,000 (21.2%). Twenty participants indicated their household income as $50,000-$59,999 (9.9%). Sixteen participants indicated their household income $30,000-$39,999 (8%). Another 16 participants indicated $40,000-$49,999 as their household income (8%). Twelve participants indicated their household income as below $20,000 (5.9%). Eleven participants indicated their household income as $20,001-$29,999 (5.5%). Ten participants indicated $70,000-$79,999 as their household income (4.9%). Another ten participants indicated their household income as $90,000-$99,999 (4.9%). Seven

participants indicated $60,000-$69,999 as their household income (3.5%). Another seven participants indicated their household family income as $80,000-$89,999 (3.5%).

Summary

A total of 202 participants were surveyed in the study. Four private co-educational non HBCU institutions located in South Carolina participated in the study. The institutions names were substituted with letters to maintain the institution anonymity. The breakdown of participants was: (a) Institution A had 26 participants (12.9%), (b) Institution B had16 participants (07.9%), (c) Institution C had participants 98 (48.5%), and (d) Institution D had 62 participants (30.7%). The majority of participants were female (70.8%), white (82.7%), had a high school GPA between 3.5-4.0 (70.9%), SAT/ACT score equivalency between 1150-1290 (37.6%), high school rank was in top 10% (41.6%), not first generation (73.3%), mother's education level of Master's degree (30.3%), father's education level of Master's degree (26.2%), applied to 2-3 colleges (45.0%), were accepted by 2-3 colleges (48.0%), are attending their first choice institution (70.8%), and did not know their household income (24.7%).

Analysis of Research Questions

Research Question One

Factor Analysis was conducted to determine what factors influence a high school senior's decision to attend private coeducational non-HBCU higher education institutions in South Carolina. Factor Analysis was chosen as the method of analysis because of the opportunity it provided discovering which individual factors combined to create more substantial factors (Kachigan, 1991) in influencing the students' college choice.

The Kaiser-Meyer-Olkin measure of sampling adequacy was conducted and found to be .791 and Bartlett's Test of Sphericity was significant ($p < .001$) (Mertler & Vannatta, 2002). Therefore, the data are adequate for a factor analysis (Tabachnick & Fidell, 1996). Table 4.14 shows the KMO and Bartlett's tests.

Table 4.14

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.791
Bartlett's Test of Sphericity	Approx. Chi-Square	2563.432
	df	528
	Sig.	.000

An oblique (promax) rotation was utilized because it is assumed that factors would be correlated (Mertler & Vannatta, 2002). Items with communalities lower than .40 were removed from the dataset unless they were determined to be pertinent to the study. Once items were removed, the data were reanalyzed until communalities met the .40 standard (Costello & Osborne, 2005). This process was repeated four times until an adequate factor loading was met for all items. Table 4.15 shows the first analysis of the data. The researcher used this method and the table 4.15 shows the communalities of the items. Using the .40 standard (Costello & Osborne, 2005), variables with the lowest communalities were removed.

Table 4.15

First Extraction for Factor Analysis

Communalities[a]	Initial	Extraction
Major/Program of Study	.231	.142*
Admission Criteria	.351	.306*
Student/Faculty Ratio	.387	.356*
Reputation of College	.503	.607
Academic Quality of University	.500	.624
University Facilities/Housing	.392	.357
Summer Program/Camp Held at University	.365	.353
Choice of Activities (Campus Life)	.470	.540
Size of Institution	.466	.449
Size of Community Surrounding College	.460	.470
Distance from Hometown	.442	.483
Size of Hometown	.518	.565
Mother (and Not Father)	.565	.625
Father (and Not Mother)	.665	.751
Both Mother and Father	.623	.671
Siblings	.419	.327*
Other Family Members	.472	.434
Alumni	.443	.652
Friends	.405	.494
Boyfriend/Girlfriend	.338	.326*
High School Counselor	.535	.724
Teacher(s)	.551	.540
Athletic Program-Observer	.719	.752
Athletic Program-Participant	.721	.937
Campus Visit	.454	.999
Open House/on Campus Event	.501	.484

College Recruiter's Visit to High School	.468	.423
College Fair	.523	.441
University Publications/Advertisements	.569	.621
Mail Received from College	.596	.681
Internet/Website	.517	.549
Cost of Attendance	.384	.336
Financial Aid Offered (loans, grants, scholarships)	.394	.919

Extraction Method: Maximum Likelihood.

*Denotes variables with < 0.4 extraction and removed.

a. One or more communality estimates greater than 1 were encountered during iterations. The resulting solution should be interpreted with caution.

The first analysis yielded 10 factor clusters that accounted for about 54% of the variance explained by the survey items. The items that were removed were (a) Major/Program of Study, (b) Admissions Criteria, (c) Student/Faculty Ratio, (d) Sibling, and (e) Boyfriend/Girlfriend. These items have an asterisk next to each item in Table 4.15. These items had communalities below the .40 standard (Costello & Osborne, 2005). Again, certain questions that were below the .40 standard were retained because they fit in the factor loadings that had the largest eigenvalues. After the first analysis, the five items were removed, shortening the survey from 33 to 28 items.

The researcher removed the low extraction variables and ran the factor extraction again with table 4.16 as the results. Once again, variables with communalities less than .40 were removed.

Table 4.16

Second Extraction for Factor Analysis

Communalities[a]	Initial	Extraction
Reputation of College	.482	.545
Academic Quality of University	.471	.677
University Facilities/Housing	.380	.365
Summer Program/Camp Held at University	.343	.278*
Choice of Activities (Campus Life)	.448	.486
Size of Institution	.373	.401
Size of Community Surrounding College	.428	.463
Distance from Hometown	.419	.484
Size of Hometown	.505	.527
Mother (and Not Father)	.551	.620
Father (and Not Mother)	.662	.772
Both Mother and Father	.606	.656
Other Family Members	.414	.385
Alumni	.425	.999
Friends	.363	.311
High School Counselor	.497	.519
Teacher(s)	.539	.649
Athletic Program-Observer	.717	.705
Athletic Program-Participant	.715	.999
Campus Visit	.408	.284
Open House/on Campus Event	.487	.416
College Recruiter's Visit to High School	.455	.361
College Fair	.507	.390
University Publications/Advertisements	.555	.616
Mail Received from College	.590	.646
Internet/Website	.490	.555

Cost of Attendance	.364	.406
Financial Aid Offered (loans, grants, scholarships)	.386	.543

Extraction Method: Maximum Likelihood.

*Denotes variables with < 0.4 extraction and removed.

a. One or more communality estimates greater than 1 were encountered during iterations. The resulting solution should be interpreted with caution.

Eight Factors clusters accounted for almost 56% of the total variance explained by the survey items. During the analysis only the variable Summer Camp/Camp Held at University was removed because its lowest extraction was below the 0.4 standard. The factor extraction was run again in table 4.16 and all variables were determined to have strong extraction values.

Table 4.17

Third Extraction for Factor Analysis

Communalities[a]	Initial	Extraction
Reputation of College	.479	.551
Academic Quality of University	.463	.658
University Facilities/Housing	.376	.377
Choice of Activities (Campus Life)	.426	.433
Size of Institution	.371	.392
Size of Community Surrounding College	.428	.472
Distance from Hometown	.419	.481
Size of Hometown	.504	.526
Mother (and Not Father)	.551	.623
Father (and Not Mother)	.660	.770
Both Mother and Father	.605	.657
Other Family Members	.408	.385
Alumni	.419	.999
Friends	.349	.309
High School Counselor	.494	.536
Teacher(s)	.536	.650
Athletic Program-Observer	.716	.706
Athletic Program-Participant	.714	.999
Campus Visit	.406	.290
Open House/on Campus Event	.473	.406
College Recruiter's Visit to High School	.450	.348
College Fair	.507	.386
University Publications/Advertisements	.549	.635
Mail Received from College	.577	.641
Internet/Website	.490	.546
Cost of Attendance	.356	.372

Financial Aid Offered (loans, grants, scholarships)	.386	.678

Extraction Method: Maximum Likelihood.

*Denotes variables with < 0.4 extraction and removed.

a. One or more communality estimates greater than 1 were encountered during iterations. The resulting solution should be interpreted with caution.

The third analysis yielded 8 factor clusters that accounted for about 54% of explained variance of students' decisions to enroll at the colleges. The researcher determined that the list of variables was strong enough to continue the factor analysis. Because communalities were greater than .40, factor loadings were analyzed to see if items clustered into themes. Table 4.18 presents the factor loadings.

Table 4.18

First Factor Analysis

Pattern Matrix[a]	Factor							
	1	2	3	4	5	6	7	8
Reputation of College	-.030	-.063	-.067	-.141	.800	.122	-.028	-.036
Academic Quality of University	-.069	.001	-.093	.045	.945	.098	-.131	.148
University Facilities/Housing*	.138	.105	.275	.073	.184	-.328	.055	-.054
Choice of Activities (Campus Life)	.049	.000	.357	.134	.210	-.214	.083	-.166
Size of Institution	-.030	.038	.520	-.127	.100	-.043	.036	-.167
Size of Community Surrounding College	-.010	.044	.738	.075	-.046	-.048	-.120	.026
Distance from Hometown	-.036	-.130	.740	-.017	-.110	.214	-.059	.121
Size of Hometown	-.055	.114	.671	-.056	-.050	.194	.000	.046
Mother (and Not Father)	-.021	.782	.151	-.041	-.135	.024	-.113	.016
Father (and Not Mother)	.020	.883	-.088	.023	.032	.018	-.012	.026
Both Mother and Father	-.044	.809	-.019	.002	.034	.001	.032	.034

Other Family Members	-.019	.378	.003	.007	.049	.154	.292	.018
Alumni*	-.018	-.023	-.108	-.023	-.109	-.010	1.097	.083
Friends*	.012	-.042	.228	.026	-.010	.237	.304	-.037
High School Counselor	.198	.041	.014	.100	.039	.603	-.014	-.079
Teacher(s)	.015	.055	.132	.022	.119	.718	.021	-.052
Athletic Program-Observer	.033	.035	-.013	.800	-.021	.094	-.032	-.046
Athletic Program-Participant	-.058	-.038	-.002	1.024	-.031	.007	.003	.053
Campus Visit*	.217	.045	.097	.082	.309	-.075	-.004	.092
Open House/on Campus Event*	.267	-.083	.207	-.059	.224	-.008	.153	-.042
College Recruiter's Visit to High School	.468	-.042	-.082	.204	-.008	.149	.026	-.093
College Fair	.505	.031	.025	-.072	.072	.127	.043	-.054
University Publications/Advertisements	.825	.087	-.221	-.001	.007	.005	.037	-.085
Mail Received from College	.834	-.053	.067	-.057	-.020	.039	-.111	.079
Internet/Website	.752	-.089	.104	-.027	-.113	-.020	-.015	.201
Cost of Attendance	.192	.146	-.066	-.058	-.046	-.077	-.030	.551
Financial Aid Offered (loans, grants, scholarships)	-.073	-.033	.079	.055	.154	-.061	.129	.844

Extraction Method: Maximum Likelihood.

*Denotes variables with < 0.4 loading removed.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Five variables loaded low enough to need to be removed. These variables did not load strongly on any factor that was generated by the analysis. Those five variables were: (a) University Facilities/Housing, (b) Alumni, (c) Friends, (d) Campus Visit, and (e) Open House/On Campus Event. After the third analysis, the survey was reduced from 27 to 22 items. Exploratory factor analysis was again conducted for a fourth time to assess the adequacy of the survey items. The results are presented in Tables 4.18 and 4.19.

Table 4.19

Final Extraction

Communalities[a]	Initial	Extraction
Reputation of College	.451	.550
Academic Quality of University	.435	.644
Choice of Activities (Campus Life)	.366	.380**
Size of Institution	.355	.400
Size of Community Surrounding College	.374	.428
Distance from Hometown	.401	.491
Size of Hometown	.472	.528
Mother (and Not Father)	.534	.615
Father (and Not Mother)	.650	.771
Both Mother and Father	.601	.655
Other Family Members	.339	.318**
High School Counselor	.486	.784
Teacher(s)	.471	.478
Athletic Program-Observer	.715	.703
Athletic Program-Participant	.712	.999
College Recruiter's Visit to High School	.436	.363**
College Fair	.498	.402
University Publications/Advertisements	.533	.649

Mail Received from College	.569	.652
Internet/Website	.467	.529
Cost of Attendance	.336	.410
Financial Aid Offered (loans, grants, scholarships)	.342	.576

Extraction Method: Maximum Likelihood.

*Denotes variables with < 0.4 extraction and removed.

**Denotes variables with < 0.4 extraction and maintained

a. One or more communality estimates greater than 1 were encountered during iterations. The resulting solution should be interpreted with caution.

Seven factors clusters including about 55% of variance were found in the final factor analysis. The researcher found all the variables to be worthy of remaining in the matrix and into the final factor analysis. The majority of the communalities were above .40. The three items (Choice of Activities (Campus Life), Other Family Members, and College Recruiter's Visit to High School) that were below .40 were determined to be necessary for the study, particularly because their factor loadings were adequate. Factors were determined based on the strength of their loadings (typically between .400 and .999) and the number of items that loaded within those factors.

The final factor analysis (table 4.20) has three factors being formed in the analysis. Although eight factors were identified from the analysis, only three factor clusters had four or more individual variables that loaded above 0.4 or below -0.4 on that factor cluster and were retained. The three factors have been named: (a) family influence, (b) institutional outreach, and (c) campus/community characteristics. The factor of family influence included the variables: (a) mother (and not father), (b) father (and not mother),

(c) both parents, and (d) other family members. The factor of institutional outreach included: (a) College Recruiter's Visit to High School, (b) College Fair, (c) University Publications/Advertisements, (d) Mail Received from College, and (e) Internet/Website. The factor of campus/community characteristics included: (a) Choice of Activities (Campus Life), (b) Size of Institution, (c) Size of Community Surrounding College, (d) Distance from Hometown, and (e) Size of Hometown.

In the final factor analysis in table 4.20, four additional factors did load with two individual variables above the .40 minimum but did not meet the minimum of four individual factors to be included in the analysis. The four factors included: (a) Athletics (both participant and observer), (b) Reputation of College and Academic Quality of University, (c) High School counselor and teacher, and (d) Cost of Attendance and Financial Aid offered. Each of these four additional factors had two significant variables, but they did not load with four or more variables and thus were not named by the researcher.

Table 4.20

Final Factor Analysis

Pattern Matrix[a]	Factor						
	1	2	3	4	5	6	7
Reputation of College	-.045	.012	-.021	-.123	.735	.041	-.008
Academic Quality of University	.001	-.044	-.046	.064	.842	.022	.159
Choice of Activities (Campus Life)	.014	.123	*.347**	.144	.270	-.187	-.189
Size of Institution	.051	.026	*.523**	-.113	.134	-.081	-.189
Size of Community Surrounding College	.037	.014	*.663**	.096	-.022	-.091	.014
Distance from Hometown	-.138	-.042	*.703**	-.013	-.102	.171	.119
Size of Hometown	.128	-.021	*.654**	-.043	-.035	.104	.043

Mother (and Not Father)	*.776**	-.014	.132	-.022	-.147	-.061	.006
Father (and Not Mother)	*.886**	.019	-.087	.034	.021	-.004	.035
Both Mother and Father	*.810**	-.045	-.021	.007	.039	.020	.040
Other Family Members	*.411**	.026	.047	-.012	.082	.193	.009
High School Counselor	-.016	.027	-.041	.028	.006	.881	-.038
Teacher(s)	.092	.010	.153	.009	.035	.564	-.032
Athletic Program-Observer	.044	.036	-.003	.797	-.023	.057	-.040
Athletic Program-Participant	-.025	-.039	.013	1.020	-.012	-.018	.046
College Recruiter's Visit to High School	-.045	*.425**	-.064	.190	.015	.198	-.094
College Fair	.024	*.462**	.040	-.084	.094	.197	-.061
University Publications/Advertisements	.106	*.835**	-.167	.010	.018	-.052	-.090
Mail Received from College	-.052	*.820**	.091	-.031	-.028	-.067	.084
Internet/Website	-.095	*.701**	.109	-.016	-.082	-.006	.202
Cost of Attendance	.124	.143	-.097	-.049	-.028	-.030	.589
Financial Aid Offered (loans, grants, scholarships)	-.015	-.046	.092	.049	.152	-.051	.770

Extraction Method: Maximum Likelihood.

*Denotes variables with > 0.4 extracted to create a factor

Rotation Method: Promax with Kaiser Normalization.

Table 4.21 shows the reliability of each factor and their corresponding Cronbach's Alpha level.

Table 4.21

Reliability of Resulting Factors

	Cronbach's Alpha	N of Items
Campus Characteristics	.735	5
Family Factor	.825	4
Institutional Outreach	.800	5

The reliability of an instrument shows the precision with which an instrument is measuring (Best & Kahn, 2006). Typically, a minimum Cronbach's Alpha level of 0.7 is necessary for an instrument to be accepted as reliable (Nunnaly, 1978). Reliability in this study was tested using the Cronbach's Alpha with the factors formed from the factor analysis all being over the 0.7 threshold.

Research Question Two

An Analysis of Variance (ANOVA) was performed to discover if there was a significant difference in the factor scores for the factors created by the factor analysis among the institutions in the study. The researcher used an ANOVA on the factors Family, Institutional Outreach, and Campus Characteristics. Of the 3 factors, two (Institutional Outreach and Campus Characteristics) were found to be significantly different among the institutions in the study. As presented in table 4.22, the Institutional Outreach factor was significantly different among institutions at .p=. 037 and the Campus Characteristics Factor was significantly different among institutions at p= .014.

Table 4.22

Institutional Comparison ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Family Factor	Between Groups	6.149	3	2.050	1.804	.148
	Within Groups	224.889	198	1.136		
	Total	231.037	201			
Institutional Outreach Factor	Between Groups	8.381	3	2.794	2.889	.037*
	Within Groups	191.440	198	.967		
	Total	199.820	201			
Campus Characteristics Factor	Between Groups	7.793	3	2.598	3.648	.014*
	Within Groups	140.990	198	.712		
	Total	148.783	201			

*Denotes variables with significance p<.05.

Table 4.23

Descriptive Statistics from ANOVA

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
						Lower Bound	Upper Bound		
Family Factor	A	26	2.5192	1.37281	.26923	1.9647	3.0737	1.00	5.00
	B	16	2.5469	.93193	.23298	2.0503	3.0435	1.00	4.25
	C	98	2.0816	1.01075	.10210	1.8790	2.2843	1.00	4.75
	D	62	2.2903	1.03741	.13175	2.0269	2.5538	1.00	4.75
	Total	202	2.2389	1.07212	.07543	2.0901	2.3876	1.00	5.00
Institutional Outreach Factor	A	26	2.7692	1.11956	.21956	2.3170	3.2214	1.00	5.00
	B	16	2.8125	.99457	.24864	2.2825	3.3425	1.00	4.00
	C	98	2.3020	.93246	.09419	2.1151	2.4890	1.00	5.00
	D	62	2.2613	.99940	.12692	2.0075	2.5151	1.00	5.00
	Total	202	2.3901	.99706	.07015	2.2518	2.5284	1.00	5.00
Campus Characteristics Factor	A	26	3.5462	.99849	.19582	3.1429	3.9495	1.80	5.00
	B	16	3.2125	.73926	.18481	2.8186	3.6064	2.20	4.60
	C	98	3.2429	.76590	.07737	3.0893	3.3964	1.40	5.00
	D	62	2.9290	.91408	.11609	2.6969	3.1612	1.00	5.00
	Total	202	3.1832	.86036	.06053	3.0638	3.3025	1.00	5.00

As presented in Table 4.24, there was no significant difference among all institutions in the first factor (family) created by the factor analysis. In the second factor (institutional outreach), significant differences occurred between institution: A and C, A and D, C and D, B and D. In the third factor (campus characteristics), significant differences occurred between institution: A and D, C and D.

Table 4.24

Fisher's LSD Comparing Institutions: Multiple Comparisons, LSD

Dependent Variable	(I) Institution	(J) Institution	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Family Factor	A	B	-.02764	.33863	.935	-.6954	.6401
		C	.43760	.23511	.064	-.0260	.9012
		D	.22891	.24901	.359	-.2621	.7200
	B	A	.02764	.33863	.935	-.6401	.6954
		C	.46524	.28736	.107	-.1014	1.0319
		D	.25655	.29884	.392	-.3328	.8459
	C	A	-.43760	.23511	.064	-.9012	.0260
		B	-.46524	.28736	.107	-1.0319	.1014
		D	-.20869	.17294	.229	-.5497	.1324
	D	A	-.22891	.24901	.359	-.7200	.2621
		B	-.25655	.29884	.392	-.8459	.3328
		C	.20869	.17294	.229	-.1324	.5497
Institutional Outreach Factor	A	B	-.04327	.31244	.890	-.6594	.5729
		C	.46719*	.21692	.032*	.0394	.8950
		D	.50794*	.22974	.028*	.0549	.9610
	B	A	.04327	.31244	.890	-.5729	.6594
		C	.51046	.26513	.056	-.0124	1.0333
		D	.55121*	.27572	.047*	.0075	1.0949
	C	A	-.46719*	.21692	.032*	-.8950	-.0394
		B	-.51046	.26513	.056	-1.0333	.0124
		D	.04075	.15956	.799	-.2739	.3554
	D	A	-.50794*	.22974	.028*	-.9610	-.0549
		B	-.55121*	.27572	.047*	-1.0949	-.0075
		C	-.04075	.15956	.799	-.3554	.2739
Campus Characteristics Factor	A	B	.33365	.26813	.215	-.1951	.8624
		C	.30330	.18615	.105	-.0638	.6704
		D	.61712*	.19716	.002*	.2283	1.0059
	B	A	-.33365	.26813	.215	-.8624	.1951

		C	-.03036	.22753	.894	-.4791	.4183
		D	.28347	.23662	.232	-.1832	.7501
		A	-.30330	.18615	.105	-.6704	.0638
	C	B	.03036	.22753	.894	-.4183	.4791
		D	.31382*	.13693	.023*	.0438	.5839
		A	-.61712*	.19716	.002*	-1.0059	-.2283
	D	B	-.28347	.23662	.232	-.7501	.1832
		C	-.31382*	.13693	.023*	-.5839	-.0438

*The mean difference is significant at the 0.05 level.

Summary

The purpose of this chapter was to answer the research questions posed in the study. The research questions were answered through descriptive statistics, Exploratory Factor Analysis, and Analysis of Variance (ANOVA). The descriptive statistics provided demographic information on the study participants. The Factor Analysis was utilized to discover which variables combined to create stronger factor clusters. The Analysis of Variance (ANOVA) was used to determine if the factors were significantly different among the institutions in the study.

A total of 202 participants were surveyed in the study. Four private co-educational non HBCU institutions located in South Carolina participated in the study. The institutions names were substituted with letters to maintain the institution anonymity. The breakdown of participants was: (a) Institution A had 26 participants (12.9%), (b) Institution B had16 participants (07.9%), (c) Institution C had participants 98 (48.5%), and (d) Institution D had 62 participants (30.7%). The majority of participants were female (70.8%), white (82.7%), had a high school GPA between 3.5-4.0 (70.9%),

SAT/ACT score equivalency between 1150-1290 (37.6%), high school rank was in top 10% (41.6%), not first generation (73.3%), mother's education level of Master's degree (30.3%), father's education level of Master's degree (26.2%), applied to 2-3 colleges (45.0%), were accepted by 2-3 colleges (48.0%), are attending their first choice institution (70.8%), and did not know their household income (24.7%).

The factor analysis of the thirty three variables discovered three factor clusters that contained four or more individual variables with factor scores of above .04 and below -.04. The three factor clusters have been named: (a) family influence, (b) institutional outreach, and (c) campus/community characteristics. The factor of family influence includes: (a) mother (and not father), (b) father (and not mother), (c) both parents, and (d) other family members. The factor of institutional outreach includes: (a) college recruiter's visit to high school, (b) college fair, (c) university publications/advertisements, (d) mail received from college, and (e) internet/website. The factor of campus/community characteristics includes: (a) choice of activities (campus life), (b) size of institution, (c) size of community surrounding college, (d) distance from hometown, and (e) size of hometown.

An ANOVA was conducted to discover if any variables created in the Factor Analysis were significantly different among the four institutions in the study. The ANOVA found that the factors of institutional outreach and campus/community characteristics were significantly different among institutions and the family influence factor was not.

CHAPTER V

DISCUSSION

Introduction

The previous chapter provided the statistical data and subsequent analysis. This chapter provides a discussion for those results. Chapter five consists of: (a) a summary of the study, (b) discussion of the findings, (c) implications for practice, (d) recommendations for future research, and (e) conclusion.

Summary of the Study

The purpose of this study was to discover the factors that influence high school seniors in South Carolina who plan on attending co-educational private non-HBCU higher education institutions. The study also was created to ascertain if there is a significant difference in the factors for incoming students to determine which college to attend among the institutions who participated in the study. A replication of this study could provide chief enrollment managers with information that could assist in the how the admissions office recruits students using similar data analysis techniques.

The instrument for this study was adapted from an original survey instrument created by a researcher at the University of Arkansas (Smith, 2006). The instrument was adapted to include variables not utilized by the original researcher. The survey consisted of demographic questions and a Likert scale containing 33 potential influential factors. The survey was conducted using the online software, surveymonkey.com. The survey began with a question to determine if the participant was over 18 years of age in order to be compliant with the Clemson University Institution Review Board. Each participant

had the option of leaving their email address for an opportunity to win a $200 gift card to the bookstore of the institution they were planning on attended.

The study was conducted by surveying the population at four higher education institutions of 994 high school seniors and 202 participants over four institutions who indicated they planned on attending a private co-educational non-HBCU in the fall of 2012. The overall response rate was 20.3%. Each of the four participant institutions were coded alphabetically (starting with A) for institutional anonymity. The first institution that agreed to participate was coded as institution A with the other institutions following in order. The number of participants per institution that completed the survey was: (a) Institution A had 26 participants; (b) Institution B had 16 participants; (c) Institution C had 98 participants; and (d) Institution D had 62 participants.

The study included the following research questions:

Research Question 1: What factors influence a high school senior's decision to attend private coeducational non-HBCU higher education institutions in South Carolina?

Research Question 2: Do the factors of influence differ among these institutions?

Researcher questions one and two were analyzed by using quantitative methodologies. Analysis of research question one was conducted by using Factor Analysis was used because the researcher did not have a clear hypothesis regarding the variables (Finch & West, 1997).

Research question 2 was analyzed using an ANOVA with the three factor clusters that were discovered in the factor analysis over the four institutions. The three factor clusters were determined in the factor analysis because each had four or more individual

factors with a factor loading above 0.4 and below -.04. Additionally, the researcher collected descriptive statistics of each of the demographic questions to provide statistical analysis of the study participants.

Discussion of the Findings

The findings of this study included some consistencies with past research but also some discrepancies. The analysis and finding in the study were completely based on the variables that the researcher included in the survey instrument. The factor analysis revealed family influence as the factor cluster with the most variance among the participants including: (a) mother (and not father), (b) father (and not mother), (c) both parents, and (d) other family members. Parents have been consistently listed as the most influential group among past research which is consistent with the results found here (Dixon & Martin, 1991).

The second strongest factor cluster, according to variance, resulting from the factor analysis was institutional outreach. Institutional outreach included: (a) college recruiter's visit to high school, (b) college fair, (c) university publications/advertisements, (d) mail received from college, and (e) internet/website. This factor cluster was somewhat consistent with past research but also provided for some definite differing conclusions. Henley and Rogers (1997) listed the campus visit as an essential factor in a student's decision to attend an institution while this study found that an admissions representative going to the student's high school was a strong influence. Adams and Eveland (2007) found that the internet is a strong influence for students in their search for a university. The current study also found evidence of the internet and the college's

website as potential factors in the decision for the student to enroll at a particular institution.

The factor analysis found that the third strongest factor, according to variance, in this study was campus and community characteristics. The factor cluster included: (a) choice of activities (campus life), (b) size of institution, (c) size of community surrounding college, (d) distance from hometown, and (e) size of hometown. Choy and Ottinger (1998) found proximity from home as a strong factor in a student choosing an institution to attend. This study also found distance from hometown and size of hometown as a potential influence on the student's decision to attend a particular institution. Armstrong and Lumsden (1999) found that a strong social life at an institution influenced a student's decision to attend an institution. This study found that the campus and community characteristics factor cluster had a large variance in the factor analysis.

This study found significant differences among institutions in 2 of the 3 factors created in the factor analysis. While the analysis of this study created only three factors, each of the factors is important for enrollment managers to have a better understanding of their incoming students. Institutions need to conduct their own analysis, particularly of their incoming freshman, to determine which factors affect their students' decision to enroll at their institution. Conducting such research could ultimately save time and money in the long run for an institution so that they can attract and be more productive in their enrollment management strategies.

Implications for Practice

In an era of tightening budgets and the need for data-driven decision making, this study describes how an institution can use a survey instrument to discover the factors that influence their incoming first time freshmen to attend their institution. Understanding the influences on a student can allow for an institution to structure their recruitment strategies in a way that could optimize the admissions budget and human resources.

The first influential factor cluster created by the factor analysis was named family influence. This factor cluster included: (a) mother (and not father), (b) father (and not mother), (c) both parents, and (d) other family members. It is vital for enrollment managers to create communications for family members with special emphasis on parents. A newsletter from the institution sent directly to parents could provide a positive message about the institution to parents who could influence their child to attend the institution. Another mode of communication to parents would be to include a website link from the admissions website with webpage strictly with information for parents. Providing parents with information targeting parents specifically could influence their opinion of an institution.

The second factor cluster created in the factor analysis was named institutional outreach. This factor cluster included: (a) college recruiter's visit to high school, (b) college fair, (c) university publications/advertisements, (d) mail received from college, and (e) internet/website. All the factors that comprised this factor cluster are directly influenced by the office of admissions at an institution. This factor cluster provides

enrollment managers with five recruitment efforts which typically coordinated by an admissions office.

The third factor cluster created in the factor analysis was named campus/community characteristics. This factor cluster included: (a) choice of activities (campus life), (b) size of institution, (c) size of community surrounding college, (d) distance from hometown, and (e) size of hometown. From the factors in the factor cluster, size was determined to be the variable with the largest factor score in the factor cluster. An admissions office could create a brochure about the size of the institution and how the size affects student learning in a positive way. This type of promotional material could be sent to students who attend small high schools, live in towns or cities with small populations.

Recommendations for Further Research

The primary goal of this study was to examine the influences on the decision making of high school senior attending private college and universities in South Carolina. A secondary goal of this study was to discover if there are differences among institutions on college choice. Data for this study were collected from four participant institutions with 202 participants completing the survey. With such a low number of participants and institutions, a replication of this study with more participants and research sites could provide different results especially since the current study has a lack of racial diversity among the participants. Non respondents in this study could have affected the overall results of the study if their beliefs differed from that of the respondents.

Only three factors were created using the factor analysis but the potential for more was present in the study's findings. Adding additional variables into the survey instrument could enhance the current survey instrument. In this study, four factor clusters did not meet the criteria of four factors but contained two strong loading factors (Mertler & Vannatta, 2002). Those potential factor clusters included: (a) Athletics (both participant and observer), (b) Reputation of College and Academic Quality of University, (c) High School counselor and teacher, and (d) Cost of Attendance and Financial Aid offered. Each of these potential factor clusters has corresponding literature with evidence that each have a strong influence in the college choice decision making process of high school seniors (Broekhemier & Seshadri, 2000; Cabrera & La Nasa, 2001; Horvat; 1997; Pampaloni, 2010; Perun, 1982; Siebert, 1994; Toma & Cross, 1998).

Adding open ended questions, focus groups, and additional qualitative data could also assist in a stronger understanding of the decision-making process of high school seniors. While the quantitative data provides the researcher the opportunity to create analysis on a broader basis, the qualitative data could provide more direct insight as to why and how each of the factors influences their decision.

An additional research study which could increase knowledge in the field would be to survey parents on their role in aiding their child's choice of institution. Discovering if differences occur in how parents and their children answer the questions regarding influential factors could provide insight into the college decision making process. While parents are often cited as a strong influence on the decision, finding out what factors they

identify as strong and use to influence their child's decision could be informative to admissions offices.

While this study was aimed at students who were planning on attending a private college or universities in South Carolina, another study would be to survey those students who chose to attend other types of institutions (i.e. public institutions, HBCU's, and single sex institutions) would yield beneficial results. Understanding why students' selection of an institution provides the institution with insight into why students chose to enroll or not enroll.

An additional study using multivariate statistical analysis with demographic factors, such as race and gender, would be useful to enrollment managers to discover differences of influence among the demographic groups. The current study did collect demographic data on the participants and conducting a multivariate analysis with the data collected could be completed.

Conclusion

The purpose of this study was to provide a framework for enrollment managers at private colleges and universities to understand the factors that influence the decision of high school seniors to enroll at their institution. Another purpose of this study was to discover if significant differences occurred among institutions as to what factors were most influential. This study provides demographic information about the participants, three main factors created from the factor analysis, and which of the three factors differed among the institutions in this study. Enrollment managers can use this study as a roadmap

to discover the influential factors of the incoming freshmen at their institution so they can use the data to create programs to potentially influence enrollment.

APPENDICES

Appendix A

IRB Approval

Dear Dr. Cawthon,

The Clemson University Office of Research Compliance (ORC) validated the protocol identified above using exempt review procedures and a determination was made on **May 28, 2012**, that the proposed activities involving human participants qualify as Exempt from continuing review under category **B2,** based on federal regulations 45 CFR 46. You may begin this study.

You checked category B1 on the application, but the project meets the requirements for B2 the best. The primary reviewer also recommended adding "other" to question 3 (race/ethnicity).

Please remember that the IRB will have to review all changes to this research protocol before initiation. You are obligated to report any unanticipated problems involving risks to subjects, complications, and/or any adverse events to the Office of Research Compliance (ORC) immediately. All team members are required to review the "Responsibilities of Principal Investigators" and the "Responsibilities of Research Team Members" available at http://www.clemson.edu/research/compliance/irb/regulations.html.

We ask that you notify the ORC when your study is complete or if terminated. Please let us know if you have any questions and use the IRB number and title in all communications regarding this study.

Good luck with your study.

All the best,

Nalinee

Nalinee D. Patin
IRB Coordinator
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Appendix B

Agreement to Use Instrument

On Tue, Apr 24, 2012 at 1:30 PM, Rebel D. Smith <RSmith@walton.uark.edu> wrote:

Brian, I have attached the instrument I am administering at Orientation. You can see the factors that I have added – social media, email, etc. Everything looks good. Good luck. I hope you get a high response rate. Rebel

Rebel Smith, Ed.D.
Associate Director of Admissions
Graduate School of Business
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The Walton MBA is ranked **25th** among public programs by U.S. News & World Report and is **#2**, overall, in employment at graduation.

From: Brian Oneil [mailto:bhoneil@g.clemson.edu]
Sent: Thursday, April 19, 2012 9:49 AM
To: Rebel D. Smith
Subject: Dissertation Question

Dear Dr. Smith,

My name is Brian O'Neil and I am a PhD student at Clemson University. I am looking at studying college choice at three universities in South Carolina and came across your dissertation. I was wondering if we could chat about your instrument as I would like to use something very similar to yours. If we can chat for maybe 15-20 minutes that would be incredibly helpful to me. Please email me back when you have a chance. Thank you for your time!

Sincerely,

Brian O'Neil
Clemson University
bhoneil@clemson.edu
(757) 748-7018

Appendix C

Email Sent to Institutional Gatekeeper

My name is Brian O'Neil and I am completing my PhD at Clemson University in Educational Leadership. The topic of my dissertation is college choice of high school seniors and I was hoping I could survey your incoming freshmen on this subject. I would like to email all incoming first-time full-time freshmen at your institution on the reasons they chose your institution. I have attached a copy of my instrument for the study for your perusal. Please email me back when you have a chance and let me know if your institution is interesting in this type of study and when we can chat about implementing it. Thank you very much for your assistance!

Sincerely,

Brian O'Neil
PhD Candidate
Clemson University
bhoneil@clemson.edu
(757) 748-7018

Appendix D

Instrument

Please answer the following questions to the best of your ability. If a question does not contain a precise answer that describes you, please choose the closest response available. Thank you for participating in this survey. It should only take approximately ten minutes to complete.

1. As of today's date are you currently 18 years of age or older?
    A. Yes

IF YOU ARE NOT CURRENTLY 18 YEARS OF AGE OR OLDER, PLEASE DO NOT COMPLETE THIS SURVEY.

Section 1

2. What is your Gender?
    A. Male
    B. Female

3. Do you consider yourself to be Hispanic or Latino/a?
    A. Yes
    B. No

4. In addition, please select one or more of the following racial categories to best describe yourself.
    A. American Indian or Alaska Native
    B. Asian
    C. Black or African American
    D. Native American or Other Pacific Islander
    E. White

5. What was your cumulative (overall) high school GPA?
    A. 3.5-4.0
    B. 3.0-3.49
    C. 2.5-2.99
    D. 2.0-2.49
    E. Below 2.0

6. What was your highest SAT combined Verbal and Quantitative score?
   A. 1450-1600
   B. 1300-1440
   C. 1150-1290
   D. 1000-1140
   E. 850-990
   F. Below 850
   G. I took the ACT and scored an overall _____

7. What was your overall high school class rank?
   A. Top 10%
   B. Top 25%
   C. Top 50 %
   D. Top 75%
   E. Bottom 25%

8. What is the highest level of education obtained by your biological or step father?
   A. Some high school
   B. High School Diploma/GED
   C. Some College
   D. Certificate
   E. Associates Degree
   F. Bachelor's Degree
   G. Master's Degree
   H. Doctorate

9. What is the highest level of education obtained by your biological or step mother?
   A. Some high school
   B. High School Diploma/GED
   C. Some College
   D. Certificate
   E. Associates Degree
   F. Bachelor's Degree
   G. Master's Degree
   H. Doctorate

10. Are you the first member of your immediate family to enroll at a four year college or university?
    A. Yes
    B. No

11. What is your best estimate of your parent's combined/household income?
    A. Below $20,000
    B. $20,001-$29,999
    C. $30,000-$39,999
    D. $40,000-$49,999
    E. $50,000-$59,999
    F. $60,000-69,999
    G. $70,000-79,999
    H. $80,000-89,999
    I. $90,000-$99,999
    J. $100,000+
    K. Unknown

12. The college I will attend is in the same state as the high school I attended?
    A. True
    B. False

13. How many miles (approximately) is the college you are in enrolling in the fall from your hometown?
    A. Under 20 miles
    B. 21-50 miles
    C. 51-75 miles
    D. 76-100 miles
    E. Over 100 miles

14. How many colleges did you apply for admission?
    A. 1
    B. 2-3
    C. 4-5
    D. 6 or more

15. How many acceptances did you receive?
    A. 1
    B. 2-3
    C. 4-5
    D. 6 or more

16. The university I chose is my _____ choice?
    A. First
    B. Second
    C. Third
    D. Over Third

Section 2

Please complete each of the items below indicating how strongly each item influenced your decision to enroll at the university you will attend in the fall with **1** being **no influence, 3 being some influence** and **5** being **most influential**.

1. major/program of Study
2. admission criteria
3. student/faculty ratio
4. reputation of college
5. academic quality of university
6. university facilities/housing
7. summer program/camp held at university
8. choice of activities (campus life)
9. size of college
10. size of community surrounding college
11. distance from hometown
12. size of hometown
13. mother (and not father)
14. father (and not mother)
15. both mother and father
16. siblings
17. other family members
18. Alumni
19. friends
20. boyfriend/girlfriend
21. high school counselor

22. teacher(s)
23. athletic program-observer
24. athletic program-participant
25. campus visit
26. open house/on campus event
27. college recruiter's visit to high school
28. college fair
29. university publications/advertisements
30. mail received from college
31. Internet/Website
32. cost of attendance
33. financial aid offered (loans, grants, scholarships)

Thank you for completing this survey. Your participation is greatly appreciated.

Are you interested in being included in a raffle for a $200 gift certificate to the bookstore of the school you are planning on attending? If yes, please add your email address to the blank below and you will be added to the drawing. Your email address and the information you have provided will be separated and no one will be able to identify the information you provided.

Appendix E

Emails Sent to Prospective Participants

EMAIL 1:

Dear Student,

My name is Brian O'Neil and I am a PhD student at Clemson University. I am currently writing my dissertation on college choice and would like to offer you the opportunity to participate in this study. If you participate in this study you can be entering into a drawing for a **$200 gift certificate** to the bookstore of the institution you will be attending in the fall. Below is a link to a survey that will take approximately ten minutes to complete. All of your information will be anonymous and not identifiable to anyone viewing the data. The data will kept on a password protected computer in a locked office on the campus of Clemson University. If you have any questions regarding this study, please contact me at bhoneil@clemson.edu. If you are interested in participating, please go to https://www.surveymonkey.com/s/CollegeChoice2012 and complete the survey. Thank you for your support!

Sincerely,

Brian O'Neil
PhD Candidate
Clemson University

REMINDER EMAIL:

Dear Student,

My name is Brian O'Neil and I am a PhD student at Clemson University. I am currently writing my dissertation on college choice and would like to offer you another opportunity to participate in this study. You received an email one week ago about this opportunity and if you did complete the survey, thank you for your participation. If you have not and are interested the survey will take approximately ten minutes to complete. By completing the survey you can be added to a drawing for a **$200 gift certificate** to the bookstore of the institution you will be attending in the fall. All of your information will be anonymous and not identifiable to anyone viewing the data. The data will kept on a password protected computer in a locked office on the campus of Clemson University. If you have any questions regarding this study, please contact me at bhoneil@clemson.edu. If you are interested in participating, please go to https://www.surveymonkey.com/s/CollegeChoice2012 and complete the survey. Thank you for your support!

Sincerely,

Brian O'Neil
PhD Candidate
Clemson University

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